ORDER NO. MD0303075C2

Service Manual

CD Stereo System

COMPACT disc DIGITAL AUDIO

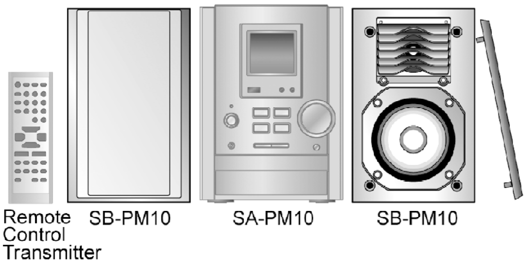
SA-PM10E / SA-PM10EB / SA-PM10EG

Colour

(S)... Silver Type

TAPE SECTION

AR2 MECHANISM SERIES


Remote Control Transmitter
SB-PM10
SA-PM10
SB-PM10

SPECIFICATIONS

Specification

■ Amplifier Section

RMS Power output	
THD 10%, both channels driven	**15 W per channel (6 Ω)**
Output impedance	
Headphone	**16-32 Ω**

■ FM Tuner Section

Frequency range	**87.50-108.00 MHz** **(50 kHz step)**
Sensitivity	**2.0 µV (IHF)**
S/N 26 dB	**1.5 µV**
Antenna terminals	**75 Ω unbalanced**

■ AM Tuner Section

Frequency range	**522-1629 KHz (9 kHz steps)** **520-1630 KHz (10 kHz steps)**
Sensitivity	
S/N 20 dB (at 999 kHz)	**560 µV/m**

■ Cassette Deck Section

Track system	**4 track, 2 channel**
Heads	
Record/playback	**Solid permalloy head**
Erasure	**AC erase head**
Motor	**DC servo motor**
Recording system	**AC bias 100 kHz**
Erasing system	**AC erase 100 kHz**
Tape speed	**4.8 cm/s**
Overall frequency response (+3 to -6 dB at DECK OUT)	
NORMAL (TYPE I)	**35 Hz - 14 kHz**
S/N	**50 dB (A weighted)**
Wow and flutter	**0.15% (WRMS)**
Fast forward and rewind time	**Approx. 120 seconds with C-60 cassette tape**

■ CD Section

Sampling frequency	**44.1 kHz**
Decoding	**16 bit linear**
Beam source	**Semiconductor laser**
Wavelength	**780 nm**
Number of channels	**2 channels stereo**
Wow and flutter	**Below measurable limit**
Digital filter	**8 fs**
D/A converter	**MASH (1 bit DAC)**

■ General

Power supply	**AC 220-230V, 50Hz**
Power consumption	**48 W**
Power consumption (Standby mode)	**0.8 W**
Dimensions (W x H x D)	**165 x 228 x 313 mm**
Mass	**3.9 kg**

Notes :

1. Specifications are subject to change without notices. Mass and dimensions are approximate.

2. Total harmonic distortion is measured by the digital spectrum analyzer.

■ **System : SC-PM10 (E)**	**Music center: SA-PM10 (E)** **Speaker: SB-PM10 (P)**
■ **System : SC-PM10 (EB)**	**Music center: SA-PM10 (EB)** **Speaker: SB-PM10 (P)**
■ **System : SC-PM10 (EG)**	**Music center: SA-PM10 (EG)** **Speaker: SB-PM10 (EG)**

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⚠ **WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C501, C604, C608, C906 & C908 through a 10 Ω , 5W resistor to ground.
DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

- **Current consumption at AC 230V, 50 Hz in NO SIGNAL mode should be ~150 mA.**

2. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- **No sound is heard when the power is turned on.**
- **Sound stops during a performance.**

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.
If this occurs, follow the procedure outlines below:

1. **Turn off the power.**
2. **Determine the cause of the problem and correct it.**
3. **Turn on the power once again after one minute.**

Note:

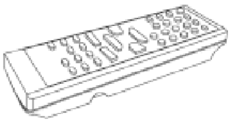
When the protection circuitry functions, the unit will not operate unless the power is first turned

off and then on again.

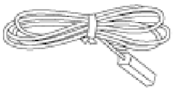
3. Accessories

Note : Refer to Packing Materials & Accessories for part number.

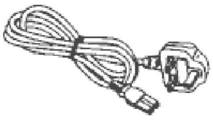
Remote Control Transmitter



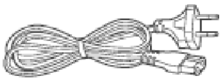
FM indoor antenna



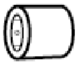
AC mains lead (For EB only)



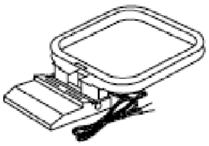
AC mains lead (For E & EG only)



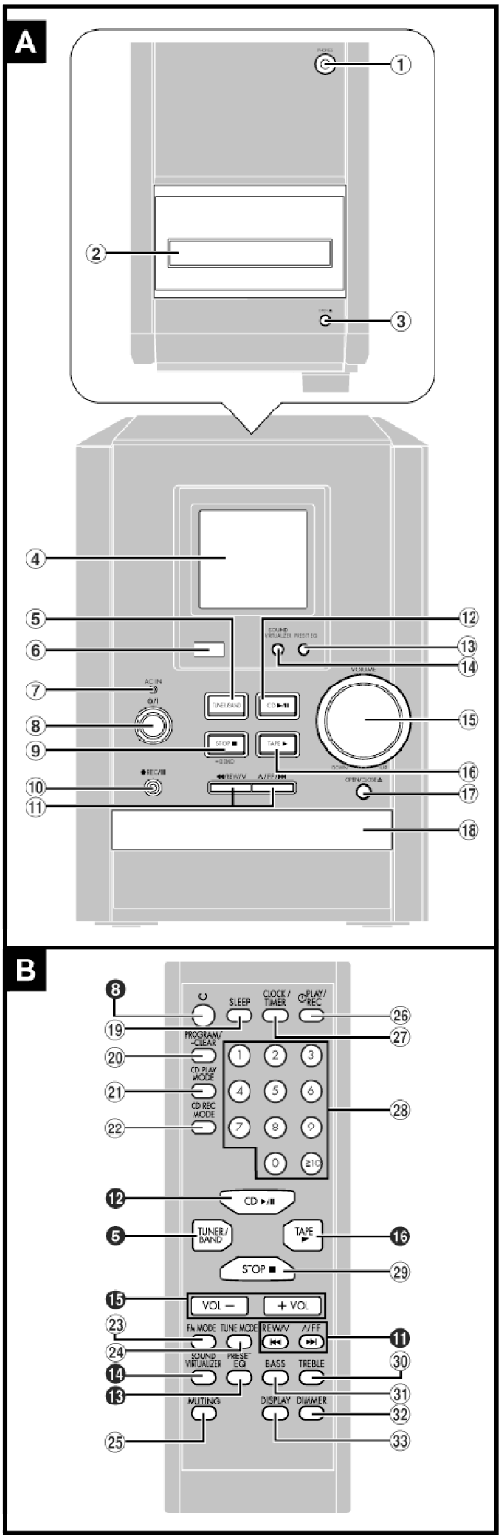
Antenna plug adapter (For EB only)



AM Loop antenna



4. Operation Procedures


A
B
PHONES
TUNER/BAND
CD ▶/II
SOUND VIRTUALIZER
PRESET EQ
AC IN
STOP ■
TAPE ▶
VOLUME
●REC/II
◀◀/REW/∨
∧/FF/▶▶
OPEN/CLOSE ▲
SLEEP
CLOCK/TIMER
PLAY/REC
PROGRAM/–CLEAR
CD PLAY MODE
CD REC MODE
1
2
3
4
5
6
7
8
9
0
≥10
VOL −
+ VOL
FM MODE
TUNE MODE
REW/∨
∧/FF
BASS
TREBLE
MUTING
DISPLAY
DIMMER

Front panel controls

A Main unit

①**Headphone jack (PHONES)**
②**Cassette lid**
③**Cassette open button (OPEN ▲)**
④**Display**
⑤**Tuner/band select button (TUNER/BAND)**
⑥**Remote control signal sensor**
⑦**AC supply indicator (AC IN)**
This indicator lights when the unit is connected to the AC mains supply.
⑧**Standby/on switch (⏻/I)**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
⑨**Stop, demonstration, TAPE/CD mode select button (STOP ■, –DEMO)**
⑩**Recording start/pause button (●REC/II)**
⑪**CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust buttons (I◀◀/REW/∨, ∧/FF/▶▶I)**
⑫**CD play/pause button (CD ▶/II)**
⑬**Preset EQ select button (PRESET EQ)**
⑭**Sound virtualizer button (SOUND VIRTUALIZER)**
⑮**Volume control (VOLUME DOWN, UP)**
⑯**Cassette play button (TAPE ▶)**
⑰**CD tray open/close button (OPEN/CLOSE ▲)**
⑱**CD tray**

B Remote Control

Buttons such as ❽ function in exactly same way as the buttons on the main unit.

⑲**Sleep timer button (SLEEP)**
⑳**CD program/clear, tuner preset button (PROGRAM/–CLEAR)**
㉑**CD play mode select button (CD PLAY MODE)**
㉒**CD recording mode button (CD REC MODE)**
㉓**FM mode, BP button (FM MODE)**
㉔**Tuning mode select button (TUNE MODE)**
㉕**Muting button (MUTING)**
㉖**Play timer/recording timer button (⊙PLAY/REC)**
㉗**Clock/timer button (CLOCK/TIMER)**
㉘**Numeric buttons**
㉙**Stop, TAPE/CD mode select button (STOP ■)**
㉚**Treble button (TREBLE)**
㉛**Bass button (BASS)**
㉜**Dimmer button (DIMMER)**
㉝**Display button (DISPLAY)**

5. Handling the Lead-free Solder

5.1. About lead free solder (PbF)

Distinction of PbF P.C.B.:

P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

Caution:

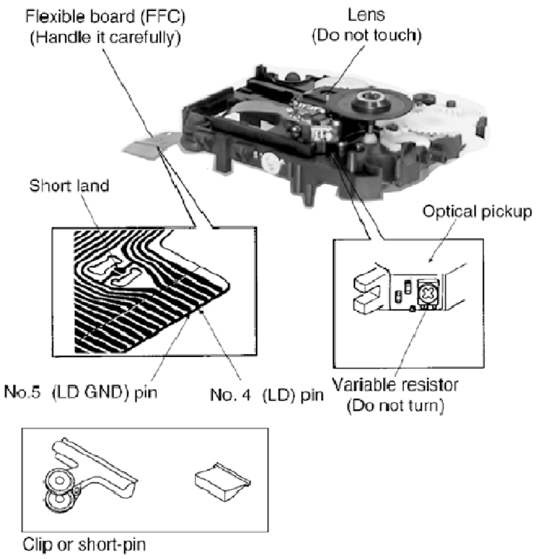
- **Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of soldering iron with temperature control, please set it to 700 ± 20°F (370 ± 10°C).**
- **Pb free solder will tend to splash when heated too high (about 1100°F/600°C).**
- **When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.**

6. Handling Precautions For Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.
So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

● **Handling of CD traverse deck (optical pickup)**

1. **Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.**
2. **The short land between the No.4 (LD) and No.5 (GND) pins on the flexible board (FFC) is shorted with a solder build-up to prevent damage to the laser diode.**
3. **Take care not to apply excessive stress to the flexible board (FPC board).**
4. **Do not turn the variable resistor (laser power adjustment). It has already been adjusted.**


Flexible board (FFC)
(Handle it carefully)
Lens
(Do not touch)
Short land
Optical pickup
No.5 (LD GND) pin
No. 4 (LD) pin
Variable resistor
(Do not turn)
Clip or short-pin

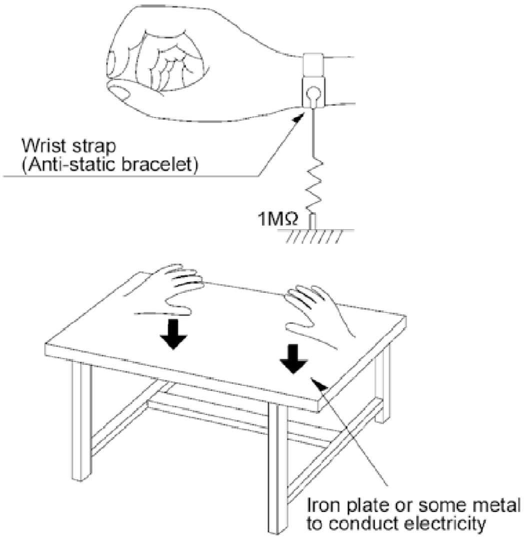
- **Grounding for electrostatic breakdown prevention**

1. Human body grounding
Use the anti-static wrist strap to discharge the static electricity from your body.

2. Work table grounding
Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is placed, and ground the sheet.

Caution :

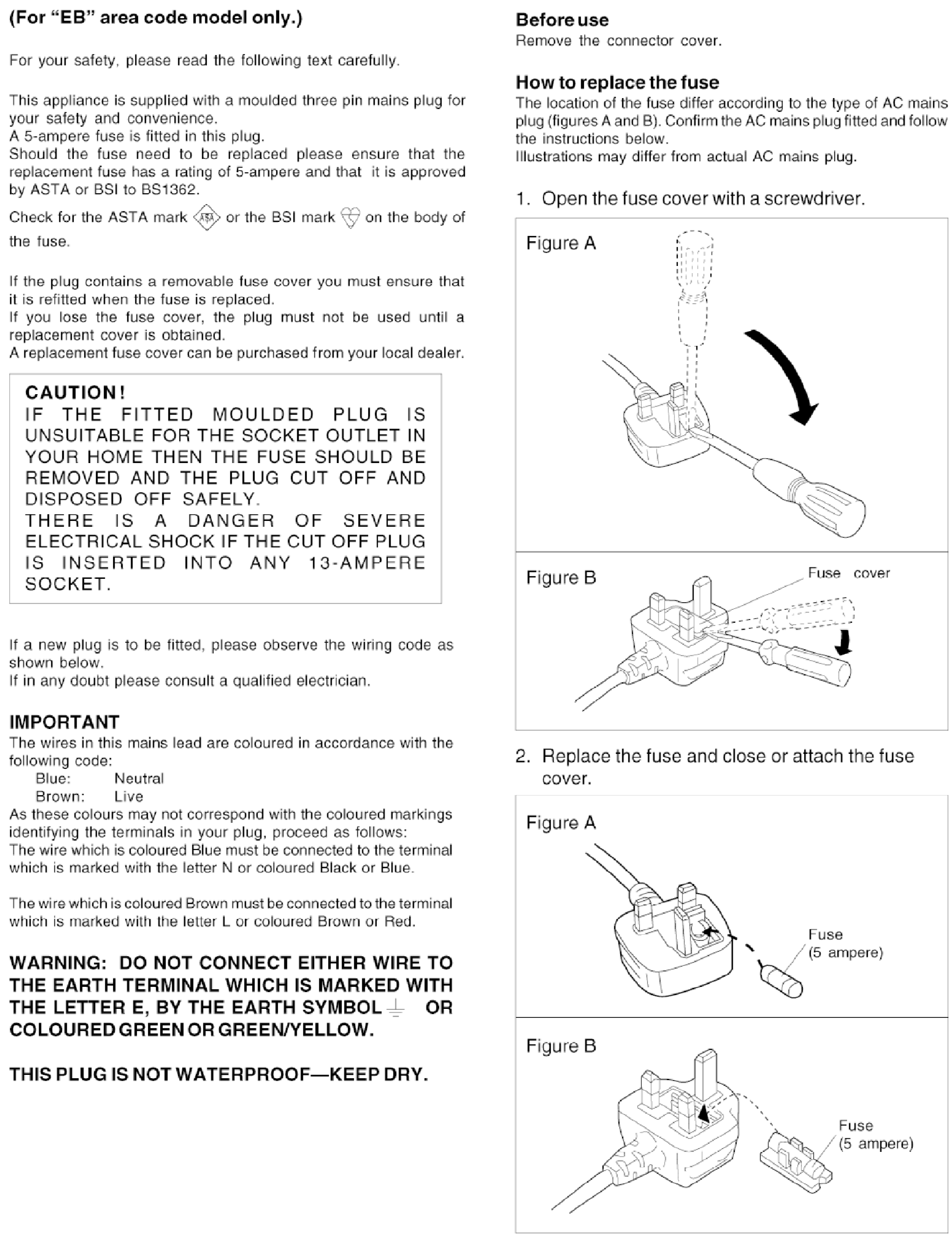
The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).


Wrist strap
(Anti-static bracelet)
1MΩ
Iron plate or some metal
to conduct electricity

Caution when Replacing the Optical Pickup :

The traverse has a short point shorted with solder to protect the laser diode against electrostatics breakdown. Be sure to remove the solder from the short point before making connections.

7. Caution for AC Mains Lead



(For "EB" area code model only.)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark or the BSI mark on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover, the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OFF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted, please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT
The wires in this mains lead are coloured in accordance with the following code:

Blue:	Neutral
Brown:	Live

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use
Remove the connector cover.

How to replace the fuse
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

Figure B

2. Replace the fuse and close or attach the fuse cover.

Figure A

Figure B

8. Operation Check and Main Component Replacement Procedures

“ATTENTION SERVICER”

Some chassis components may have sharp edges. Be careful when disassembling and servicing.

1. **This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.**
2. **For reassembly after operation checks or replacement, reverse the respective procedures.Special reassembly procedures are described only when required.**
3. **Select items from the following index when checks or replacement are required.**
4. **Refer the Parts No. on the page of "Main Component Replacement Procedures", if necessary.**

Contents

- **Checking Procedure for each major P.C.B.**
- **Checking of the Main P.C.B. & Transformer P.C.B.**
- **Checking for the Deck P.C.B. , Headphone P.C.B. and Tape Eject P.C.B.**
- **Checking for the Panel P.C.B. and Power P.C.B. and Speaker Terminal P.C.B.**
- **Checking for the CD Servo P.C.B.**
- **Disassembly and Assembly of the Disc Tray and CD Traverse Unit**
- **Disassembly of the Disc Tray**
- **Disassembly of the CD Traverse Unit**
- **Main Component Replacement Procedure**
- **Replacement of the CD Servo P.C.B. and Optical Pick-up Unit**
- **Procedure for Replacing Cassette Holder**
- **Procedure for Replacing Pinch Roller and Head Block (Cassette Mechanism Unit)**
- **Procedure for Replacing Motor, Capstan Belt A, Capstan Belt B and Winding Belt (Cassette Mechanism Unit)**
- **Procedure for Replacing parts on Mechanism P.C.B.**

Warning :-

This product uses a laser diode. Refer to caution statement

“Precaution of Laser Diode”.

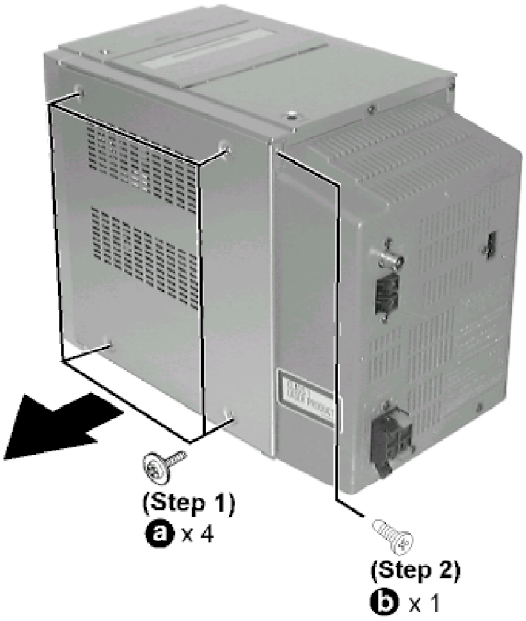
ACHTUNG :-

- Die Lasereinheit nicht zerlegen.

- Die Lasereinheit darf nur gegen eine vom Hertsteller spezifizierte Einheit ausgetauscht werden.

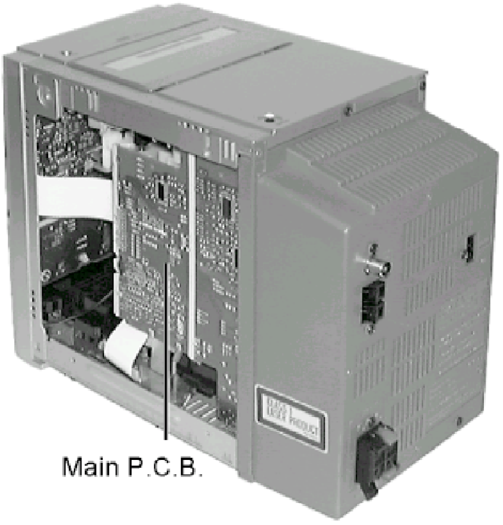
8.1. Checking Procedure for Each Major P.C.B.

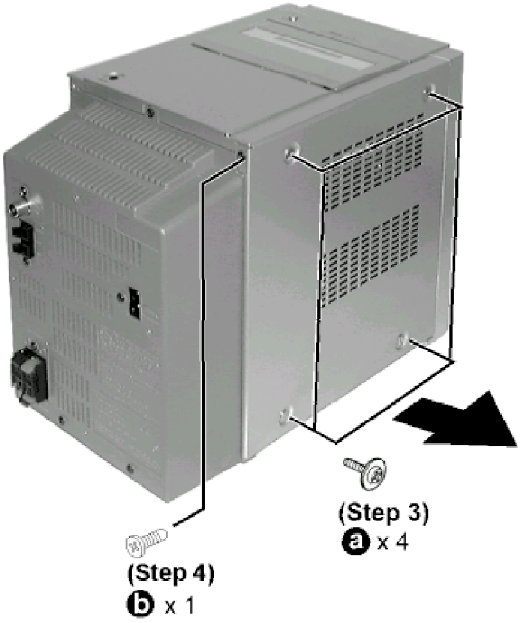
8.1.1. Checking for Main & Transformer P.C.B.



Step 1 Remove all the screws.
Step 2 Remove side panel.

- Checking for Main P.C.B.

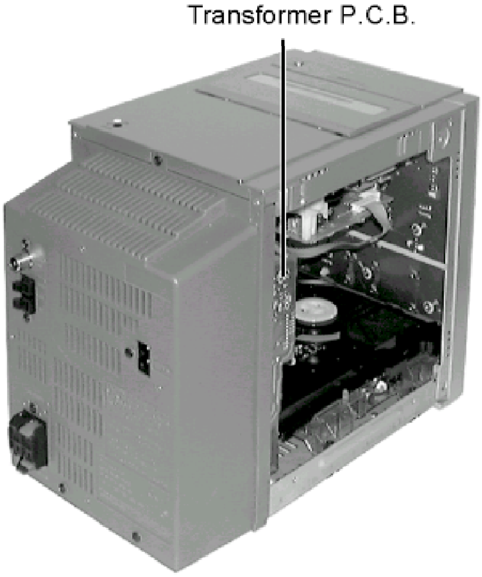



(Step 3)
a x 4
(Step 4)
b x 1

Step 3 Remove all the screws.

Step 4 Remove side panel.

- Checking for Transformer P.C.B.

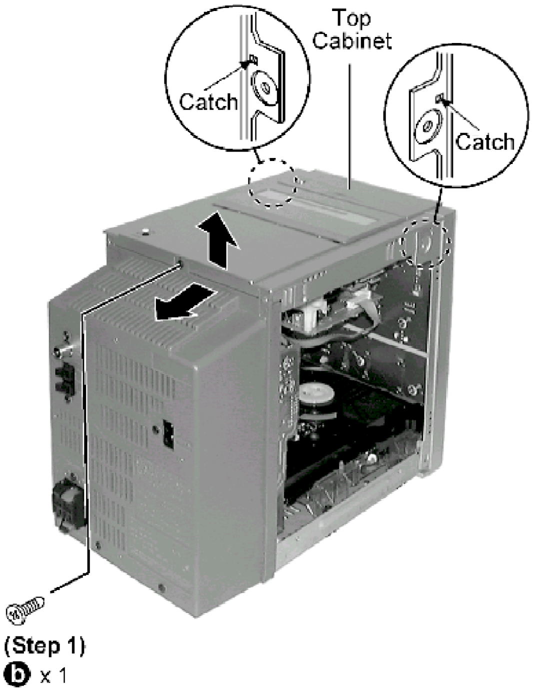

Transformer P.C.B.

8.1.2. Checking for the Deck P.C.B., Headphone P.C.B. and Tape Eject P.C.B.

- Follow the (Step 1) - (Step 4) of Item 8.1.1.

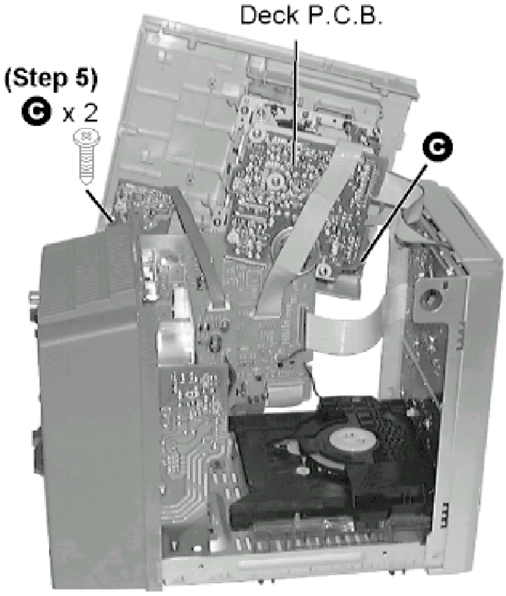
Step 1 Remove one screw at the rear chassis.

Step 2 Release claws at both ends.


Top Cabinet
Catch
Catch
(Step 1)
b x 1

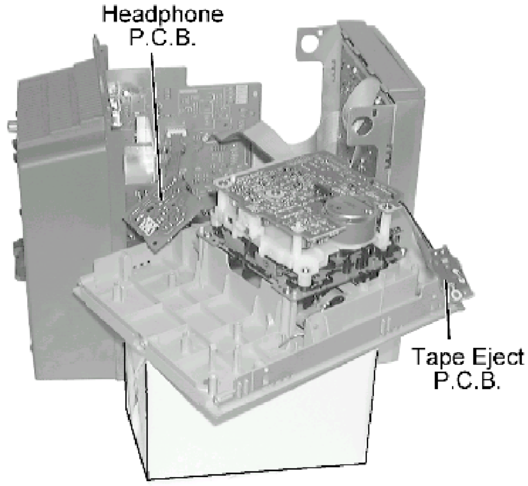
Step 3 Lift up the Top Cabinet and push backward as arrow show.
Step 4 Flip the Top Cabinet sideway.

- Checking For Deck P.C.B.


Deck P.C.B.
(Step 5)
c x 2
c

Step 5 Remove 2 screws.

- Check for Headphone P.C.B. and Tape Eject P.C.B.

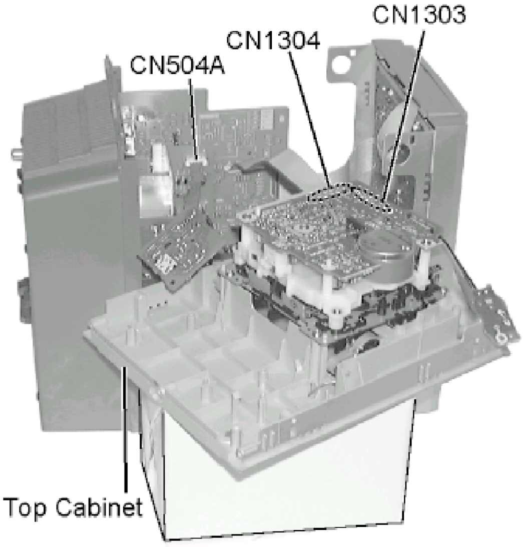

Headphone
P.C.B.
Tape Eject
P.C.B.

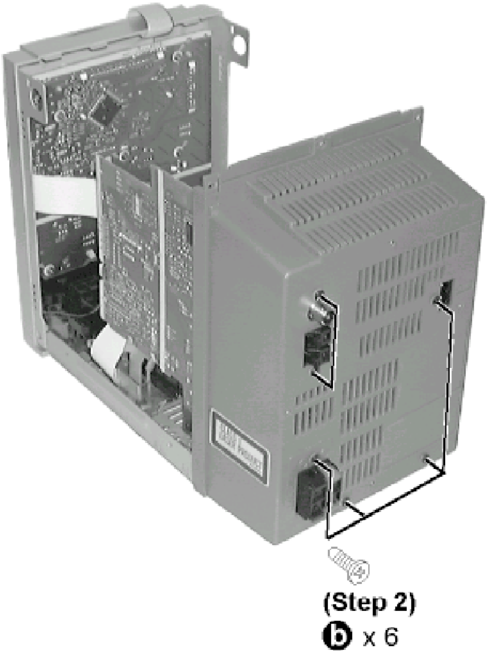
8.1.3. Checking for the Panel P.C.B., Power P.C.B. & Speaker Terminal P.C.B.

- Follow the (Step 1) - (Step 4) of Item 8.1.1.

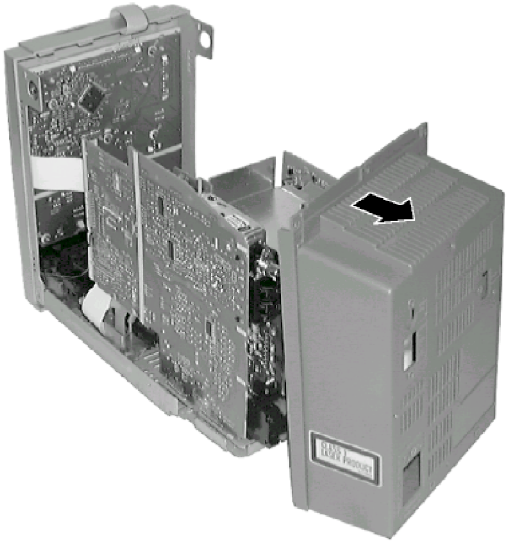
- Follow the (Step 1) - (Step 4) of Item 8.1.2.

Step 1 To detach top cabinet, release connector CN504A, CN1303 & CN1304.


CN1303
CN1304
CN504A
Top Cabinet

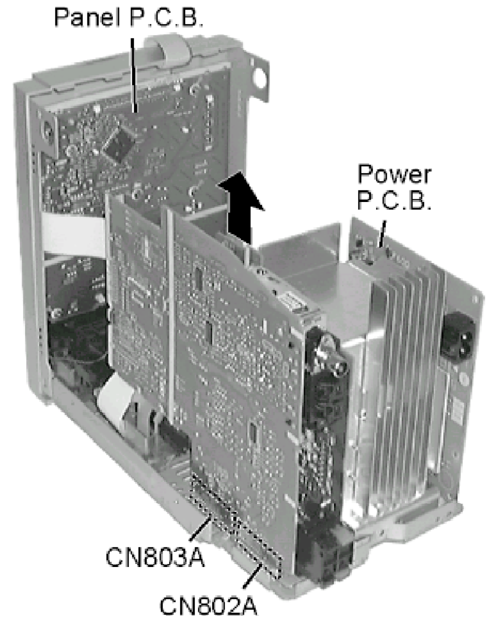


Step 2 Remove 6 screws.



Step 3 Pull back panel in the direction of the arrow shown.

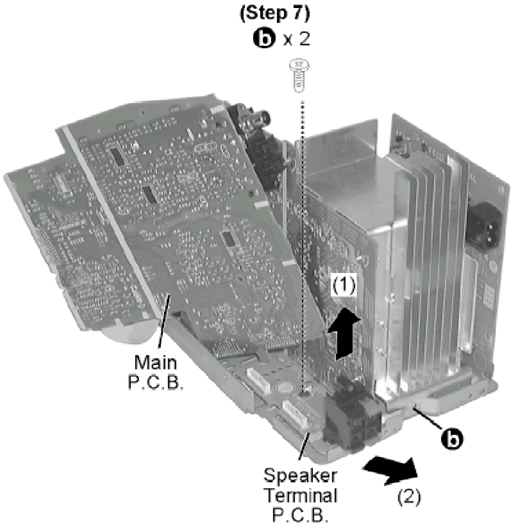
- Check the Panel P.C.B. and Power P.C.B.


Panel P.C.B.
Power P.C.B.
CN803A
CN802A

Step 4 Release 2 connectors (CN802A & CN803A).

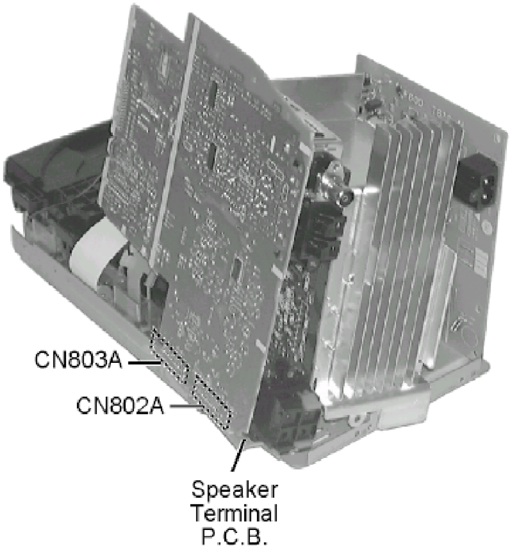
Step 5 Pull the Main P.C.B. upward

- Checking for Speaker Terminal P.C.B.


(Step 7)
b x 2
(1)
Main P.C.B.
b
Speaker Terminal P.C.B.
(2)

Step 6 Pull out Main P.C.B.

Step 7 Remove 2 screws.


CN803A
CN802A
Speaker Terminal P.C.B.

Step 8 Reconnect 2 connectors (CN802A & CN803A).

[For operation checking of main unit]

Step 9 Reverse Step 1 of Item 8.1.3. to attach top cabinet. (Deck mechanism)

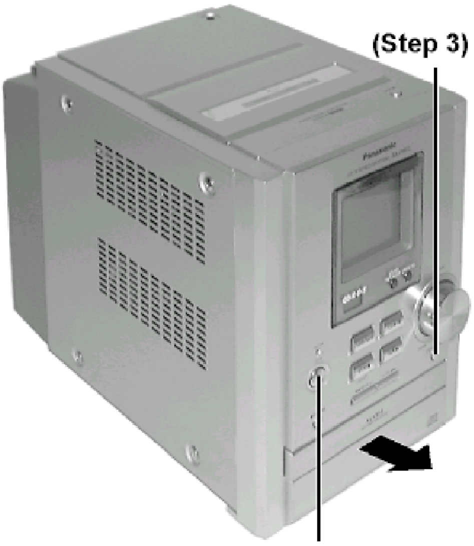
- Replacement of CD Lid

When opening the disc tray automatically (Using Power Supply)

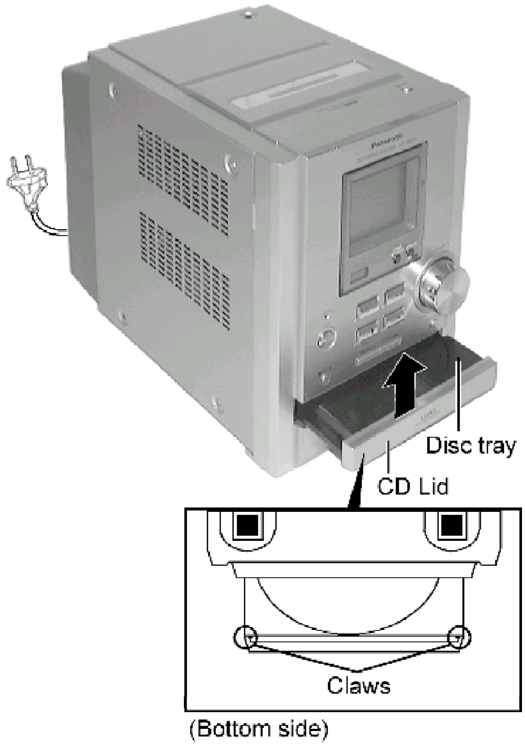
Step 1 Connect AC power cord.

Step 2 Press the POWER button to power up the main unit.

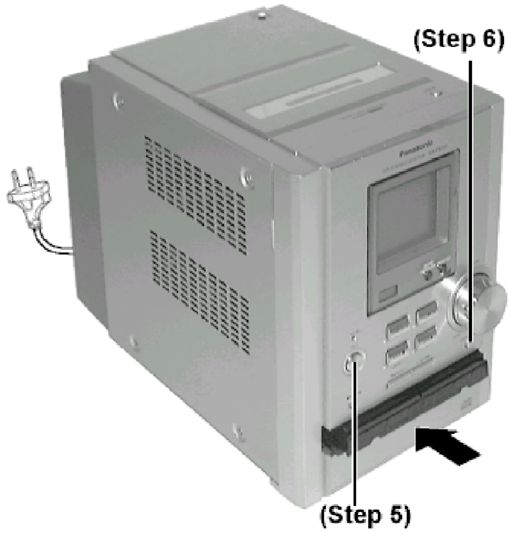
Step 3 Press the OPEN button, the disc tray will open automatically.


(Step 3)
(Step 2)
(Power button)

Step 4 Release the 2 claws, and then remove the CD lid.


Disc tray
CD Lid
Claws
(Bottom side)

Step 5 Press the POWER button to turn the power only.
Step 6 Press the OPEN/CLOSE button, the disc tray will be close.


(Step 6)
(Step 5)

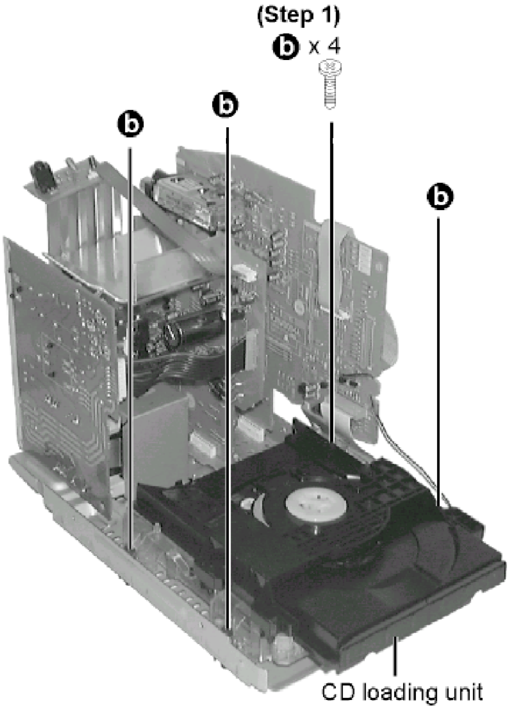
[Open the disc tray manually (Using service tools)]

- **Follow the (Step 1) - (Step 4) of Item 8.1.1.**
- **Follow the (Step 1) - (Step 4) of Item 8.1.2.**
- **Follow the (Step 1) of Item 8.2.1.**

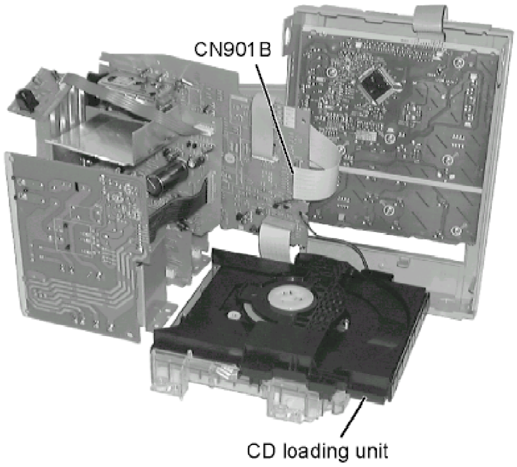
8.1.4. Checking for the CD Servo P.C.B.

- **Follow the (Step 1) - (Step 4) of Item 8.1.1.**
- **Follow the (Step 1) - (Step 5) of Item 8.1.2.**
- **Follow the (Step 1) - (Step 9) of Item 8.1.3.**

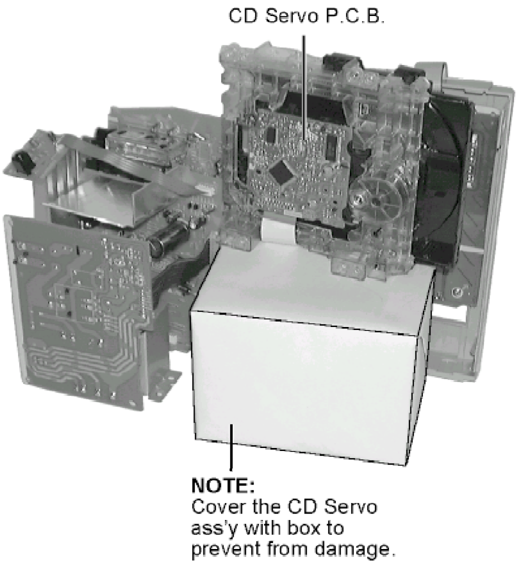
Step 1 Remove all screws.


(Step 1)
b x 4
b
b
b
CD loading unit

Step 2 Connect CN901B as shown.


CN901B
CD loading unit

- Checking CD Servo P.C.B.


CD Servo P.C.B.
NOTE:
Cover the CD Servo
ass'y with box to
prevent from damage.

Step 3 Lift up the Main P.C.B. together with the Power P.C.B. and rotate left then place the p.c.b. as shown in the following figure.
[Service Position]

8.1.5. Replacement of the Power Amplifier IC

- Replacement of the Power Amplifier IC

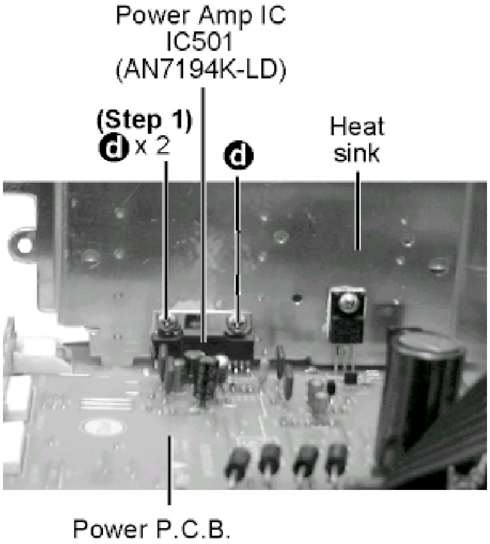
- Follow the (Step 1) - (Step 4) of Item 8.1.1.

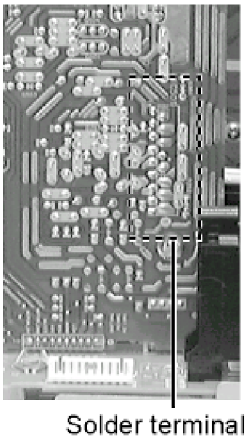
- Follow the (Step 1) - (Step 5) of Item 8.1.2.

- Follow the (Step 1) - (Step 8) of Item 8.1.3.

- Follow the (Step 1) - (Step 3) of Item 8.1.4.

Step 1 Remove 2 screws fixed to the Power Amp I.C.


Power Amp IC
IC501
(AN7194K-LD)
(Step 1)
d x 2
d
Heat
sink
Power P.C.B.



Step 2 Unsolder the terminals of Power Amp IC, transistor and replace the component.

8.2. Disassembly and Assembly of the Disc Tray and CD Traverse Unit

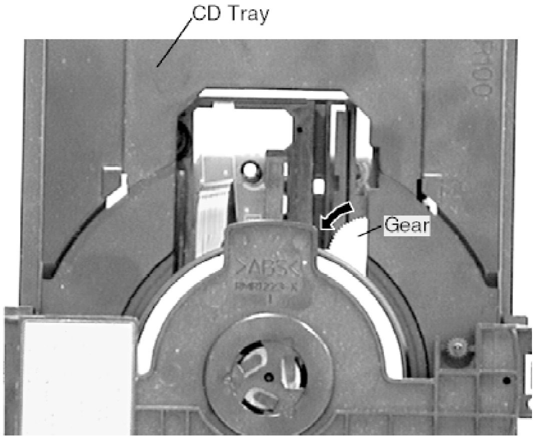
- Follow the (Step 1) - (Step 4) of Item 8.1.1.

- Follow the (Step 1) - (Step 5) of Item 8.1.2.

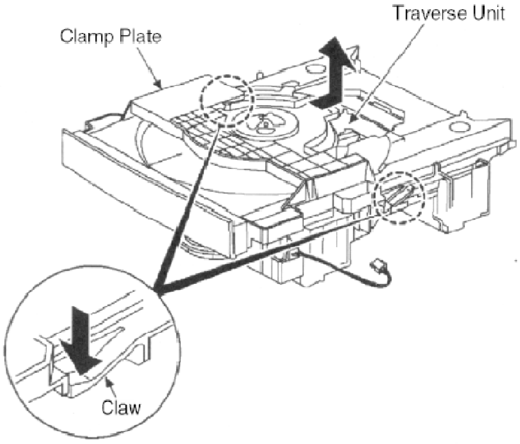
- Follow the (Step 1) - (Step 9) of Item 8.1.3.

- Follow the (Step 1) - (Step 3) of Item 8.1.4.

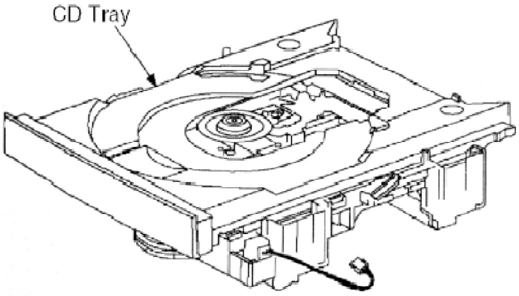
8.2.1. Disassembly of the Disc Tray.



Step 1 Turn the gear counter clock wise until the CD Tray starts to move out.

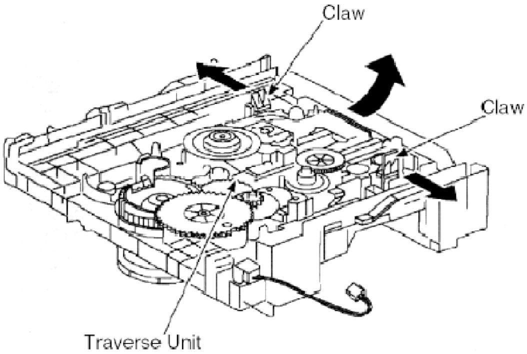

Clamp Plate
Traverse Unit
Claw

Step 2 Release the 2 claws and remove the clamp plate in the direction of the arrow.

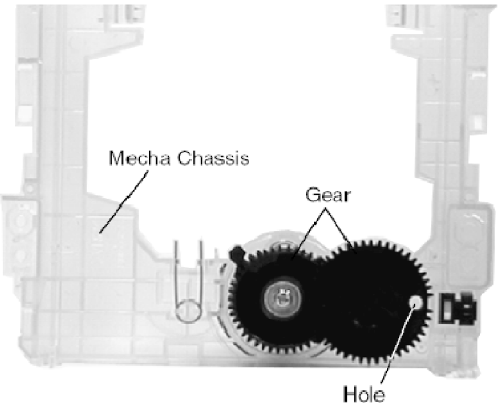


Step 3 Lift up the CD Tray to remove it.

8.2.2. Disassembly of the CD Traverse Unit.

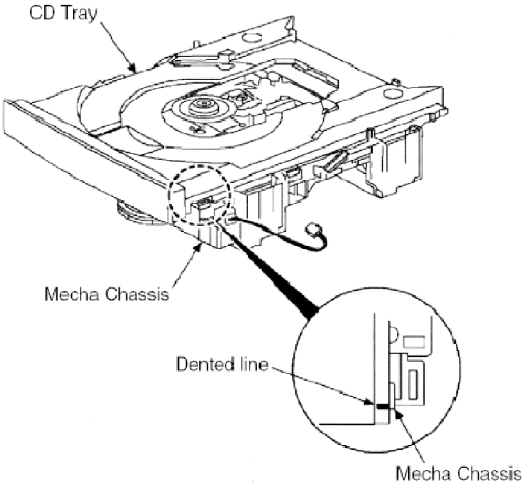

Claw
Claw
Traverse Unit

Step 1 Release the 2 claws and remove the CD Traverse Unit in the direction of the arrow.


Mecha Chassis
Gear
Hole

NOTE:

1. **Follow the reverse procedure to replace the CD Traverse Unit and CD Tray.**
2. **Make sure that the 2 gear is in position shown above and the hole on the right gear is align with the hole below it when replacing the CD Traverse Unit and CD Tray.**


CD Tray
Mecha Chassis
Dented line
Mecha Chassis

NOTE: When replacing the CD Tray, make sure the Dented line is at the position as shown.

8.3. Main Component Replacement Procedure

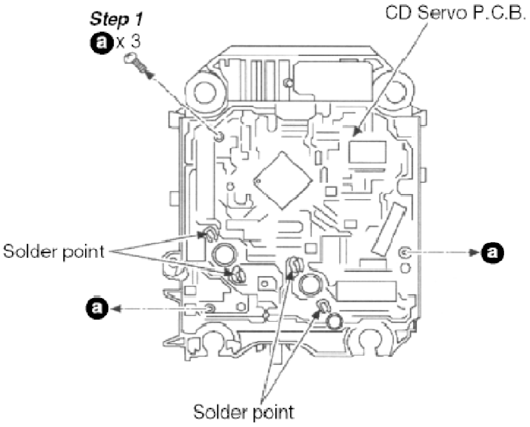
- Follow the (Step 1) - (Step 4) of Item 8.1.1.

- Follow the (Step 1) - (Step 5) of Item 8.1.2.

- Follow the (Step 1) - (Step 9) of Item 8.1.3.

- Follow the (Step 1) - (Step 3) of Item 8.1.4.

8.3.1. Replacement of the CD Servo P.C.B. and Optical Pick-up Unit.

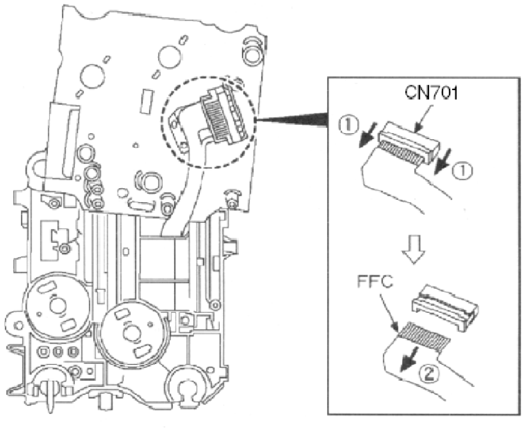

Step 1
a x 3
CD Servo P.C.B.
Solder point
a
a
Solder point

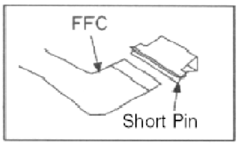
Step 2 Desolder the 4 legs of 2 motors and flip over the CD Servo P.C.B.

Step 3 Remove the flexible cable at CN701.

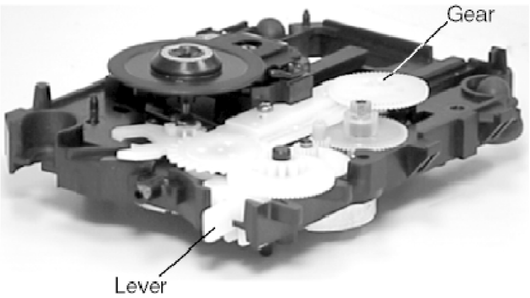
- Removal of the flexible cable / Push the top of the connector in the

direction of the arrow 1 and then pull out the flexible cable in the direction of the arrow 2.

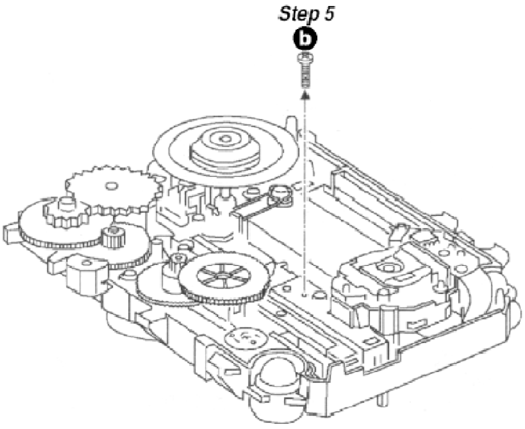

CN701
①
①
FFC
②

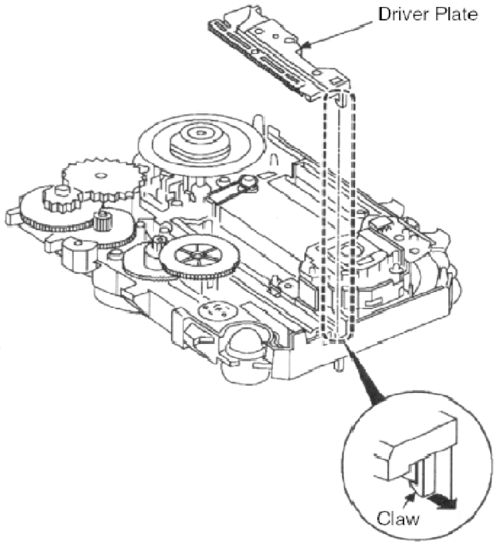

FFC
Short Pin

NOTE: Insert a short pin into the flexible cable.

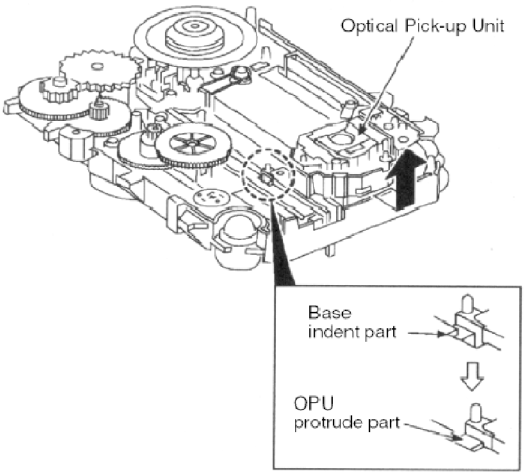


Step 4 Push the lever in and turn the gear clock wise fully.

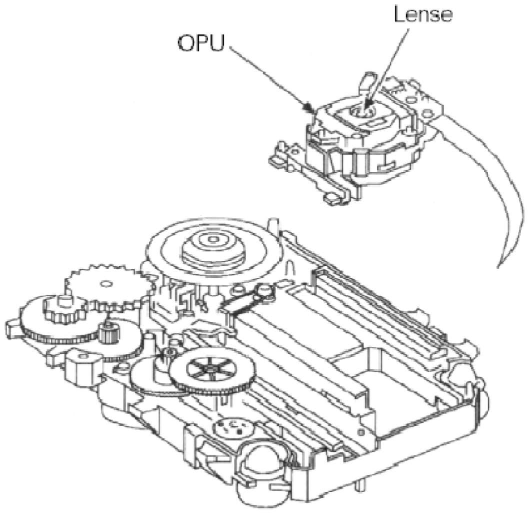



Driver Plate
Claw

Step 6 Release the claw and remove the Driver Plate.


Optical Pick-up Unit
Base
indent part
OPU
protrude part

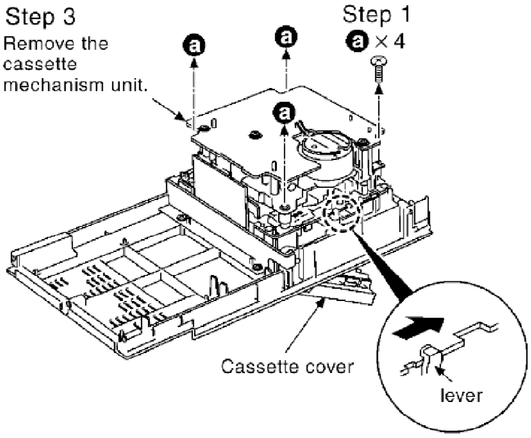
Step 7 Slide out the Optical Pick-up Unit from the indent opening.



NOTE: Do not touch the Lense on the OPU.

8.4. Procedure for Replacing Cassette Holder

- **Follow the (Step 1) - (Step 4) of Item 8.1.1.**
- **Follow the (Step 1) - (Step 5) of Item 8.1.2.**
- **Follow the (Step 1) - (Step 9) of Item 8.1.3.**
- **Follow the (Step 1) - (Step 3) of Item 8.1.4.**

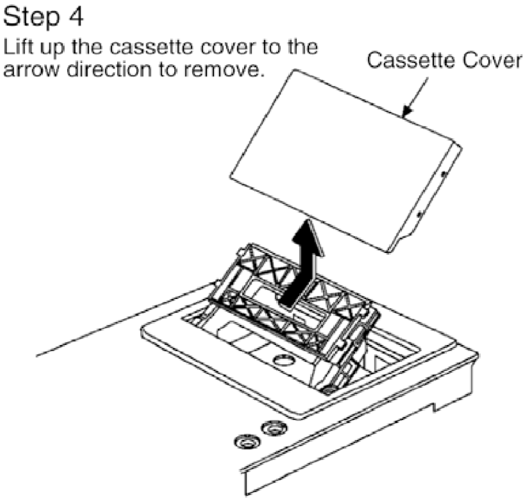


Step 3
Remove the cassette mechanism unit.

Step 1
ⓐ × 4

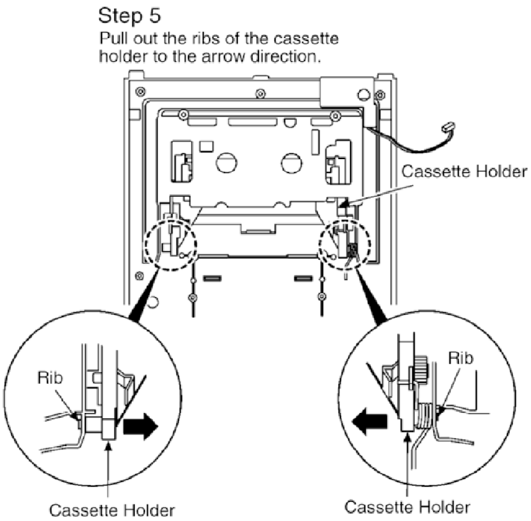
ⓐ
ⓐ
ⓐ
Cassette cover
lever

Step 2 Press the lever to open the cassette cover.



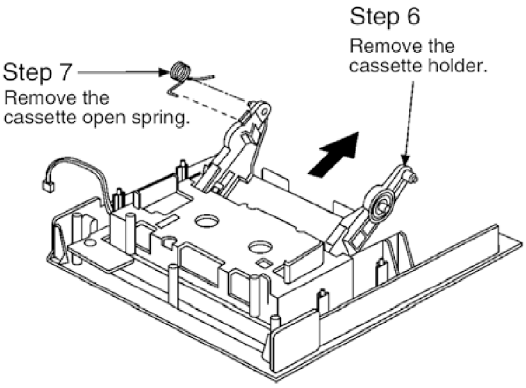
Step 4
Lift up the cassette cover to the arrow direction to remove.

Cassette Cover



Step 5
Pull out the ribs of the cassette holder to the arrow direction.

Cassette Holder
Rib
Rib
Cassette Holder
Cassette Holder


Step 6
Remove the cassette holder.
Step 7
Remove the cassette open spring.

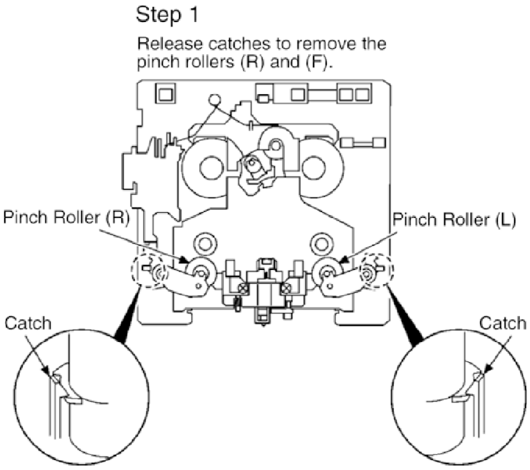
8.5. Procedure for Replacing Pinch Roller and Head Block (Cassette Mechanism Unit)

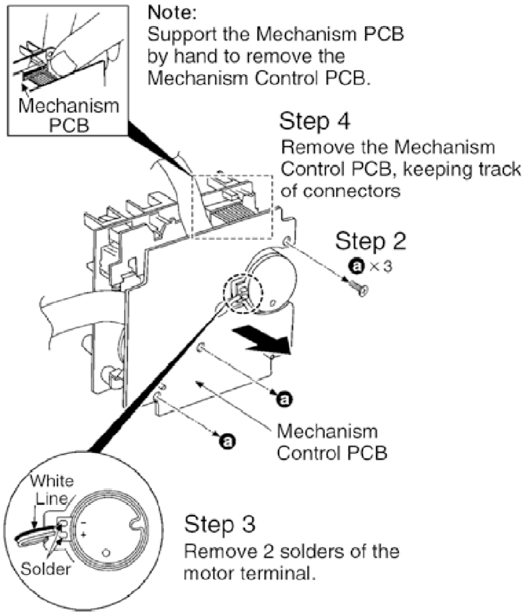
- Follow the (Step 1) - (Step 4) of Item 8.1.1.

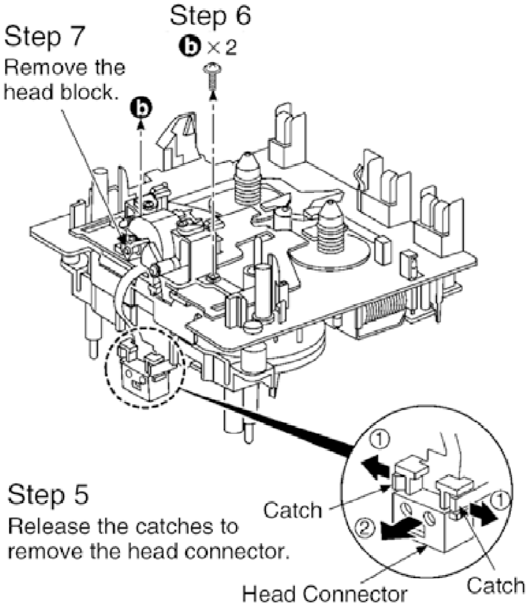
- Follow the (Step 1) - (Step 5) of Item 8.1.2.

- Follow the (Step 1) - (Step 9) of Item 8.1.3.

- Follow the (Step 1) - (Step 3) of Item 8.1.4.

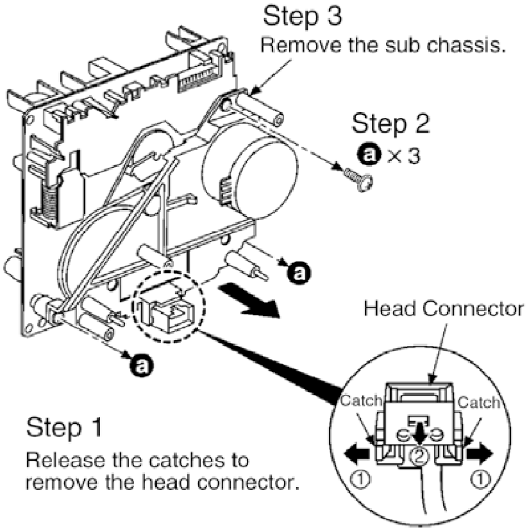

Step 1
Release catches to remove the pinch rollers (R) and (F).
Pinch Roller (R)
Pinch Roller (L)
Catch
Catch


Note:
Support the Mechanism PCB by hand to remove the Mechanism Control PCB.
Mechanism PCB
Step 4
Remove the Mechanism Control PCB, keeping track of connectors
Step 2
a × 3
a
a
Mechanism Control PCB
White Line
Solder
Step 3
Remove 2 solders of the motor terminal.


Step 7
Remove the head block.
Step 6
b × 2
b
Step 5
Release the catches to remove the head connector.
Catch
①
①
②
Head Connector
Catch

8.6. Procedure for Replacing Motor, Capstan Belt A, Capstan Belt B, and Winding Belt (Cassette Mechanism Unit)

- **Follow the (Step 1) - (Step 4) of Item 8.1.1.**
- **Follow the (Step 1) - (Step 5) of Item 8.1.2.**
- **Follow the (Step 1) - (Step 9) of Item 8.1.3.**
- **Follow the (Step 1) - (Step 3) of Item 8.1.4.**

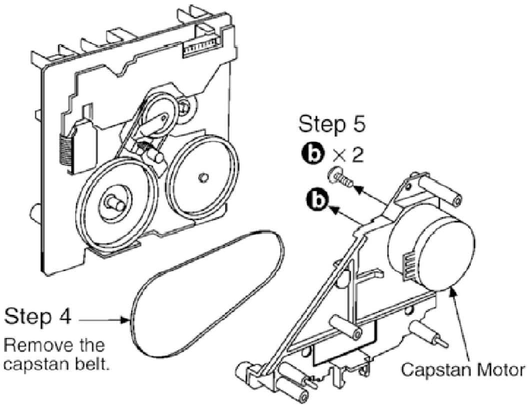


Step 3
Remove the sub chassis.

Step 2
ⓐ × 3

Step 1
Release the catches to
remove the head connector.

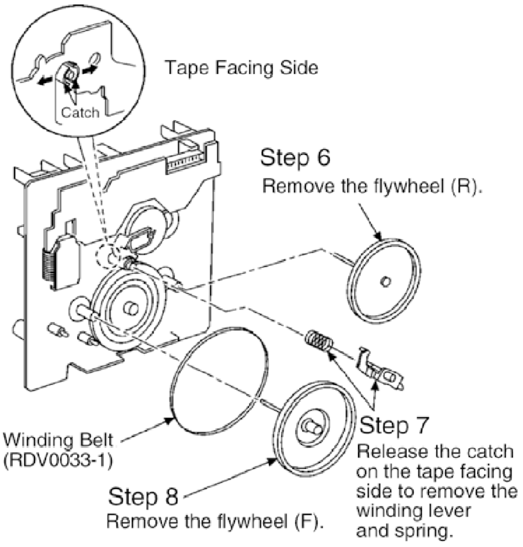
ⓐ
Head Connector
Catch
Catch
②
①
①
ⓐ



Step 5
ⓑ × 2

Step 4
Remove the
capstan belt.

ⓑ
Capstan Motor



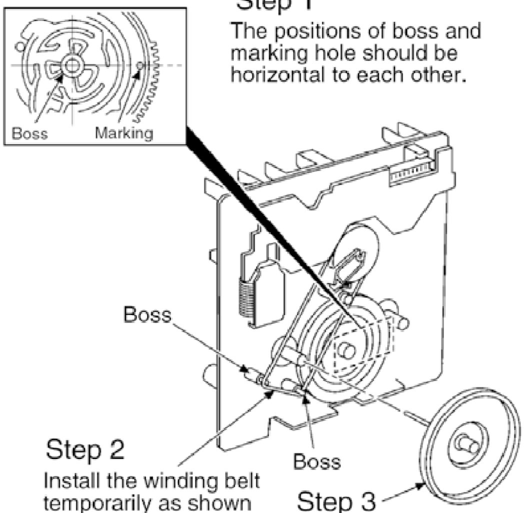
Step 6
Remove the flywheel (R).

Step 7
Release the catch
on the tape facing
side to remove the
winding lever
and spring.

Step 8
Remove the flywheel (F).

Tape Facing Side
Catch
Winding Belt
(RDV0033-1)

Installing Belt


Boss
Marking
Boss
Boss

Step 1

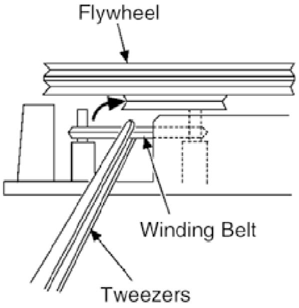
The positions of boss and marking hole should be horizontal to each other.

Step 2

Install the winding belt temporarily as shown in the figure above.

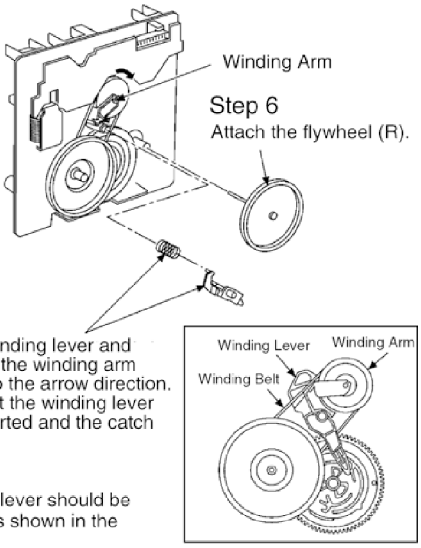
Step 3

Attach the flywheel (F).


Flywheel
Winding Belt
Tweezers

Step 4

Catch the winding belt on the flywheel (F).


Winding Arm
Winding Lever
Winding Arm
Winding Belt

Step 6

Attach the flywheel (R).

Step 5

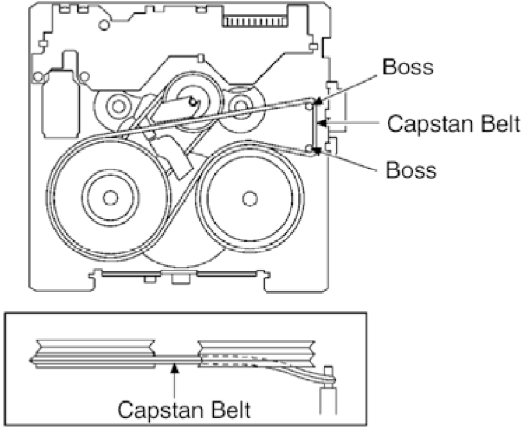
Install the winding lever and spring while the winding arm is pressed to the arrow direction. (Be sure that the winding lever is firmly inserted and the catch is hooked.)

Note:

The winding lever should be positioned as shown in the right figure.

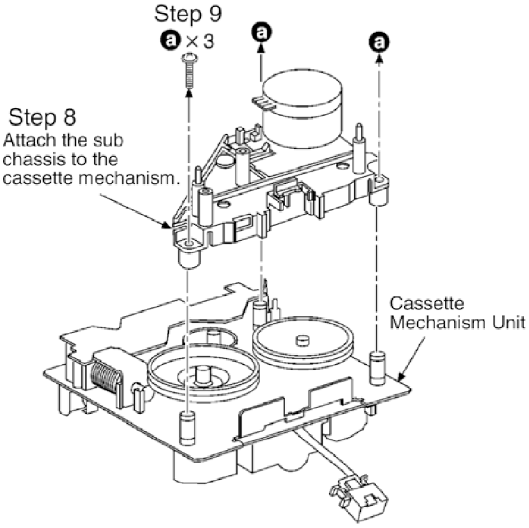
Step 7

Install the capstan belt temporarily as shown in the figure below.


Boss
Capstan Belt
Boss
Capstan Belt

Side View

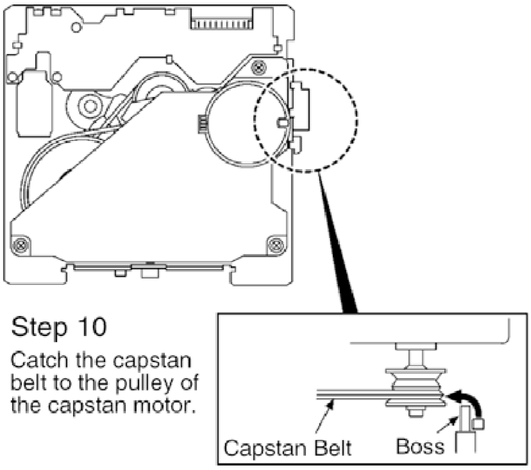
Note:
Keep the belt away from grease.


Step 9

Step 8

Attach the sub chassis to the cassette mechanism.

a × 3
a
a
Cassette Mechanism Unit


Step 10

Catch the capstan belt to the pulley of the capstan motor.

Capstan Belt
Boss

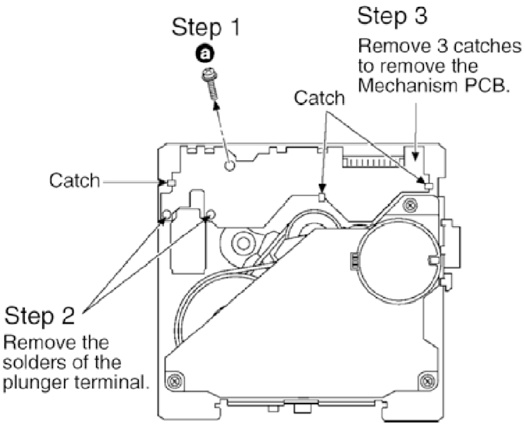
8.7. Procedure for Replacing Parts on Mechanism PCB

- Follow the (Step 1) - (Step 4) of Item 8.1.1.

- Follow the (Step 1) - (Step 5) of Item 8.1.2.

- Follow the (Step 1) - (Step 9) of Item 8.1.3.

- Follow the (Step 1) - (Step 3) of Item 8.1.4.



Step 1

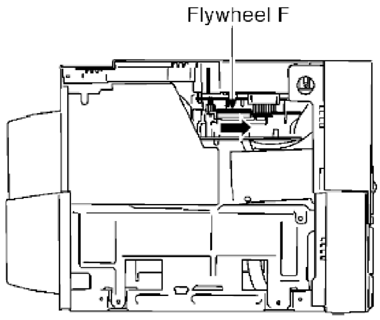
Step 3
Remove 3 catches to remove the Mechanism PCB.

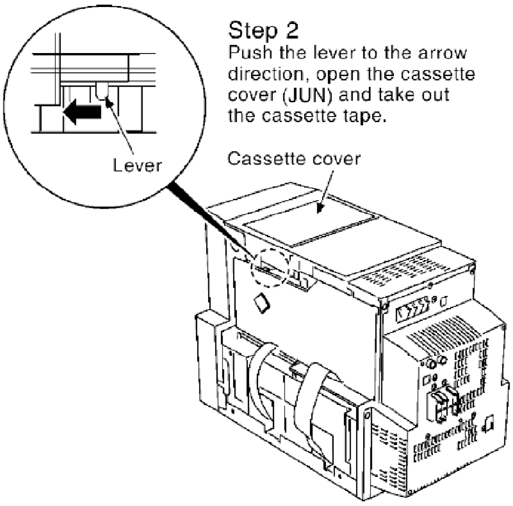
Step 2
Remove the solders of the plunger terminal.

8.8. Handling of cassette tape jam

- Follow the (Step 1) - (Step 4) of Item 8.1.

Step 1
If the cassette tape is not ejected due to twining around capstan or pinch roller during playing or recording, rotate a flywheel F to the arrow direction to remove twined tape.





Step 2
Push the lever to the arrow direction, open the cassette cover (JUN) and take out the cassette tape.

9. Self-Diagnostic Display Function

This unit is equipped with a self-diagnostic function which, in the event of a malfunction, automatically display a code indication the nature of the malfunction. Use this self-diagnostic function when servicing the unit.

9.1. Entering self-diagnostic Mode

1. **Turn the power on.**
2. **Switch to TAPE mode with no CD, cassette loaded.**
3. **Press and hold the STOP button for at least 2 seconds, and while still pressing the STOP button, press the Forward Skip/Search button for at least 2 seconds. The unit enters Self-Diagnostic Mode and display “T”. Then an error code (e.g. H01) is displayed, if any. In the case of no error, “T” is displayed on FL.**
4. **If more than 1 error exists, the display will sequentially show the respective error codes each time the STOP button is pressed.**

9.2. Cassette Mechanism Test (For error code H01, H02, H03, F01, F02)

1. **Load a cassette tape with the erasure prevention tab, remove from left side only and close the cassette holder.**
2. **Press "Forward Skip/Search" (Tape will be stop after 2 seconds).**
3. **Load a cassette tape with the erasure prevention tab, remove from right side only and close the cassette holder.**
4. **Press "Reverse Skip/Search" (Tape will be stop after 2 seconds).**
5. **Load a pre-recorded tape with both side record tabs intact and close the cassette holder.**
6. **Press "Tape Play" (After TPS function, tape will stop automatically).**
7. **Press "Tape Record".**
8. **Press "Stop" to indicate Error code.ve).**
   ~ If several problem exist, error code will change each time when "Stop" is pressed.
   (e.g. H01 → H03 → F01..... etc.)

9.3. Clearing all error code

1. Press and hold STOP button for 5 seconds.
2. FL indicator shows “CLEAR” for 1 second and change to “T”.

9.4. Cancelling the Self-Diagnostic mode

1. Press the “Power” button to turn off the system. Press the “Power” button again to turn on the system.

9.5. Description of error code

9.5.1. Power Amplifier Failure (F61)

When power amplifier output failure for power supply failure.

9.5.2. Error detection for CD Block

Error Code	Problem Condition	Possible Cause
F15	CD does not function	REST SW detection error. This error occurs when the Optical Pick Up REST SW (S701) detected within the specified time. (about 8 seconds).
H15	The CD tray closes	CD disc tray detect switch NG. (Check and replace)
F26	CD does not function	Transmission error between CD servo LSI and micon. This error occurs between CD servo LSI and micon. This err when the POWER is ON for the CD block and an error is dete the transmission has started.
Abnormal item	Error Display	Method of detection
F75	CD power abnormal	Under normal operation (self-diagnostic mode inclusive), ch CDRST is H for SELECTOR at CD. If it is not H after 1 sec, it memorised as an error.

9.5.3. Error detection code for Cassette Mechanism Block

Error Code	Problem Condition	Possible Cause
H01	Cassette deck main functions	MODE SW detection error. Faulty contact or short circuit of mechanism mode switch.
H02	Recording not possible	REC INH SW detection error. Faulty contact or short circuit of REC INH switch. (S974, S9
H03	Playback cannot perform.	HALF SW detection error. Faulty contact or short circuit of HALF switch. (S972)
F01	The tape advances slightly and then stops.	Reel pulse detection error. Faulty reel pulse, faulty hole detect IC. (IC971)
F02	Cassette deck will not perform TPS function.	Faulty TPS drive IC. (IC303)

10. Precaution of Laser Diode

Caution :

This product utilizes a laser diode with the unit turned "ON", invisible laser radiation is emitted from the pick up lens. / Wavelength : 780 nm / Maximum output radiation power from pick up : 100 μ W/VDE / Laser radiation from pick up unit is safety level, but be sure the followings:

1. Do not disassemble the optical pick up unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pick up unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pick up lens for a long time.

ACHTUNG :

Dieses Produkt enthält eine Laserdiode. Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit abgestrahlt. / Wellenlänge : 780nm / Maximale Strahlungsleistung der Lasereinheit :100 μ W/VDE / Die Strahlung an der Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werkseitig justierten Einstellregler der Lasereinhit nicht verstellen.
3. Nicht mit optischen Instrumenten in die Fokussierlinse blicken.
4. Nicht über längere Zeit in die Fokussierlinse blicken.

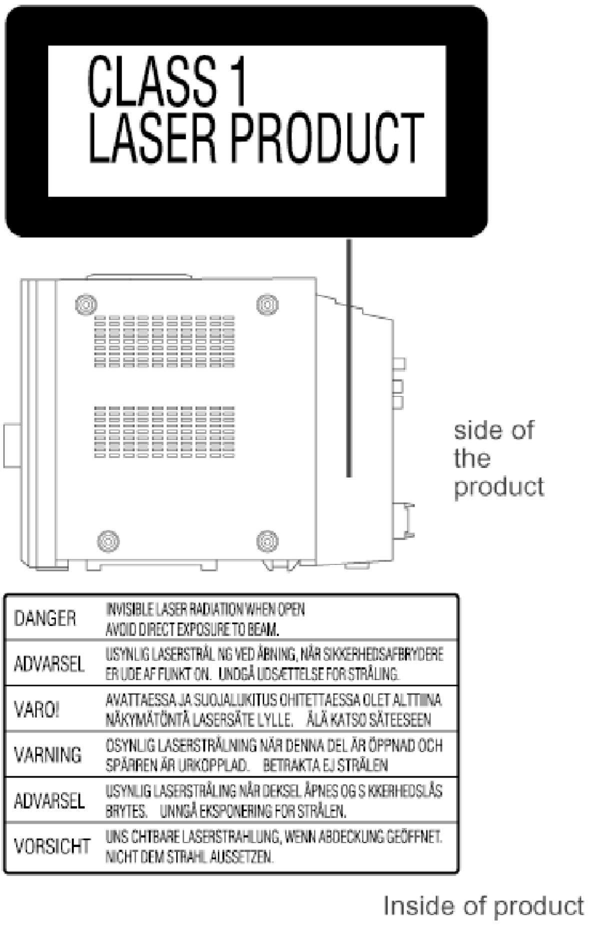
ADVARSEL :

I dette a apparat anvendes laser.

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN TH
SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

■ **Use of Caution Labels**



DANGER	INVISIBLE LASER RADIATION WHEN OPEN AVOID DIRECT EXPOSURE TO BEAM.
ADVARSEL	USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO!	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTÖNTÄ LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN
VARNING	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN
ADVARSEL	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.

11. Procedure for Checking Operation of Individual Parts of Cassette Mechanism Unit

11.1. Operation Check with Cassette Tape

1. Pull up the EJECT lever using a rubber band. (Cf. Fig. 6)

2. Supply DC5V to MOTOR. (→ MOTOR rotates.) (Cf. Fig. 5)

3. Insert a cassette tape to the unit.

4. Supply DC9V to the plunger, and turn the power ON and OFF. (→ Power +PL, -PL) (Cf. Fig. 5)

- **A. FWD PLAY: Supply the plunger power in a flash. (ON: approx. 5msec)**
- **B. FWD FF: Supply the plunger power in a flash at PLAY mode. (ON: approx. 5msec)**
- **C. STOP: Supply the plunger power in a flash at FWD FF mode.**

(ON: approx. 5msec)

D. REV PLAY: Supply the plunger power in a normal timing at STOP mode. (ON: approx. 200msec)

E. REV REW: Supply the plunger power in a flash at REV PLAY mode. (ON: approx. 50msec)

F. STOP: Supply the plunger power in a flash at FF mode. (ON: approx. 50msec)

Repeat the operation (→ FWD PLAY)

(Note) Other operation may start if a timing of supplying the plunger power is missed.

11.1.1. Connection Status between Mechanism and Power Supply (Motor, Plunger)

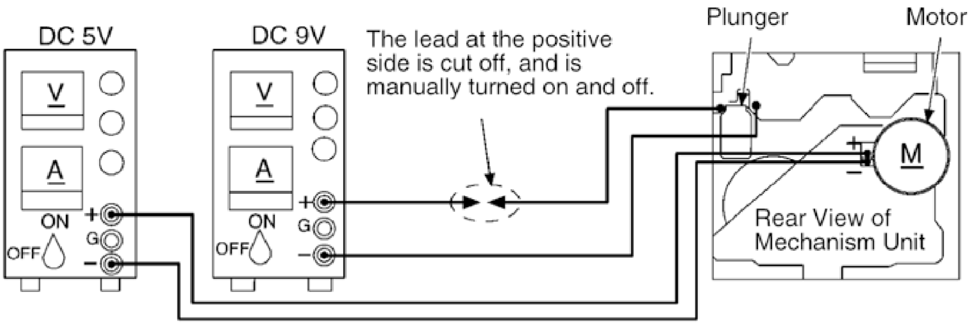
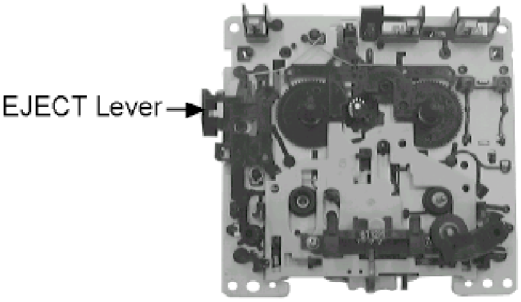

DC 5V
V
A
ON
OFF
+
G
−
DC 9V
V
A
ON
OFF
+
G
−
The lead at the positive side is cut off, and is manually turned on and off.
Plunger
Motor
+
−
M
Rear View of Mechanism Unit

Fig. 5

11.1.2. Operative Parts of Mechanism Unit (EJECT lever fitted with rubber band, / Plunger/Rib operation)

Fig. 6

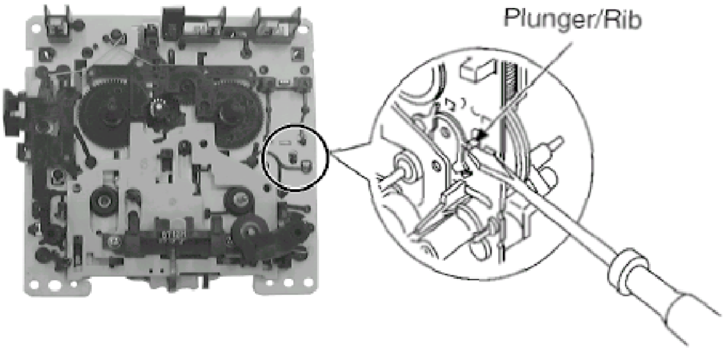

EJECT Lever

11.2. Operation Check without Cassette Tape

1. **Pull up the EJECT lever using a rubber band. (Cf. Fig. 6)**
2. **Supply DC5V to MOTOR. (→ MOTOR rotates.)**
3. **Lift up the mechanism unit’s plunger/rib with the tip of a negative screwdriver, and operate the unit in the same timing as /**

supplying the power. (Cf. Fig. 7) /

Fig. 7



12. Measurement And Adjustments

12.1. Tuner Section

12.1.1. AM-IF Alignment

- AM-IF ALIGNMENT

SIGNAL GENERATOR OR SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER OSCILLOSCOPE)	ADJUSTMENT(Shown in Fig.9)	RE
CONNECTIONS	FREQUENCY				
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	450 kHz	Point of non-interference (on/ about 600 kHz)	Headphone Jack (32 Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	Z2 (AM IFT)	Adju maxi outp

- AM-RF ALIGNMENT

SIGNAL GENERATOR OR SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONIC VOLTMETER OSCILLOSCOPE)	ADJUSTMENT(Shown in Fig.9)	RE
CONNECTIONS	FREQUENCY				
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	522 kHz	Tuning capacitor fully closed.	Headphone Jack (32 Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	Z1 (AM OSC Coil)	Adju maxi outp
Fashion a loop of several turns of wire and radiate signal into loop of receiver.	603 kHz	Tuning capacitor fully open.	Headphone Jack (32 Ω) Fabricate the plug as shown in Fig. 2 and then connect the lead wires of the plug to the measuring instrument.	Z1 (AM ANT Coil)	Adju maxi outp

12.2. Cassette Deck Section

12.2.1. Requirements

- Test tape (QZZCFM) (QZZCWAT)
- Normal blank cassette tape (QZZCRA)
- Digital frequency counter
- Oscilloscope
- Electrical voltmeter
- Headphone jack output jig (Cf. Fig. 8)

12.2.2. Setting of Unit

- VOLUME: MAX

12.2.3. Preparations

1. Apply [8.1 Checking for Main & Transformer P.C.B., Deck P.C.B., Headphone P.C.B. and Tape Eject P.C.B.] under [8. Operation Check and Main Component Replacement Procedures].
2. Remove 4 screws from the mechanism unit to disassemble. (Refer to [8.4 Procedure for Replacing Cassette Holder (Step 1) under [8. Operation Check and Main Component Replacement Procedures].
3. Connect the headphone jack output jig (Cf. Fig. 8) to headphone jack.

Fig. 8

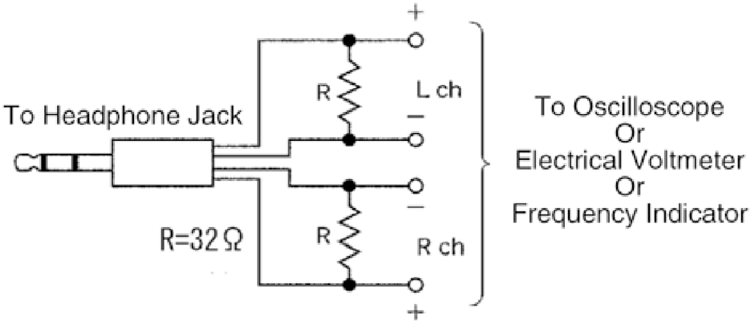
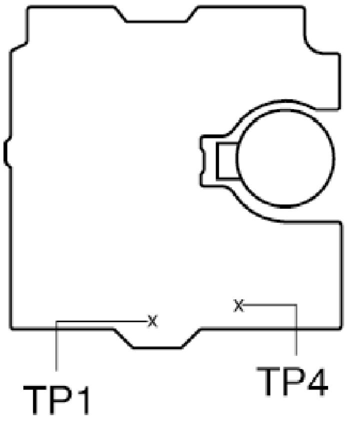

To Headphone Jack
R=32Ω
R
R
+
L ch
−
−
R ch
+
To Oscilloscope
Or
Electrical Voltmeter
Or
Frequency Indicator

Fig. 9



12.2.4. Tape Speed Adjustment

- Normal speed adjustment (only during forward playback)
(Product reference value: 3,000±90Hz)

1. Connect a frequency indicator. (Cf. Fig. 12)

2. Playback the middle portion of the test tape (QZZCWAT).

3. Adjust the motor screw so that the following output level is produced. (Cf. Fig. 10)
Adjustment Range: 3,000 ± 90Hz (a constant speed)

Fig. 10

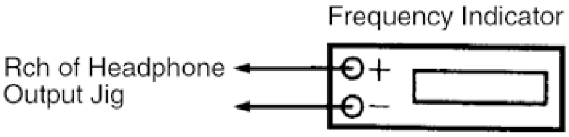
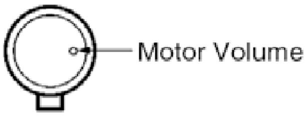

Frequency Indicator
Rch of Headphone
Output Jig
+
−

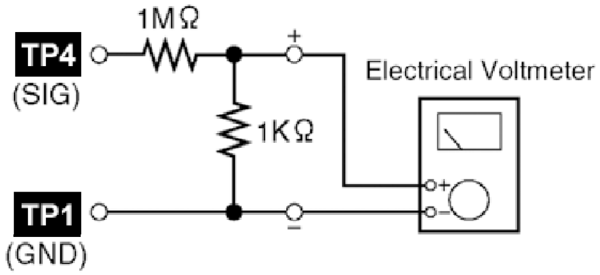
Fig. 11



12.2.5. Bias Voltage Check

1. Connect an electrical voltmeter. (Cf. Fig. 9) (Cf. Fig. 12)
2. Set the function to “TAPE” position.
3. Insert a normal blank cassette tape (QZZCRA).
4. While pressing and holding down [REC (●/❚❚)] button, press [TAPE (▶)] button to pause the recording mode. (Repeat pressing the buttons till the recording pause mode is activated.)
5. Check that the output level is within the standard range.
   Standard Range: 14 ± 4mV

Fig. 12

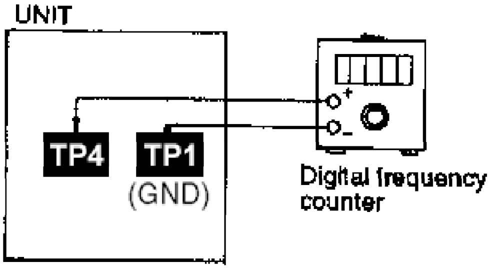


12.2.6. Bias Frequency Check

1. Connect a digital frequency counter (Figure 13).
2. Set the function to “TAPE” position.
3. Insert a normal blank cassette tape (QZZCRA) and press “REC” mode on main unit.
4. Check that the output frequency is within the standard range.

Standard Value: 98 ±8 kHz

Fig. 13


UNIT
TP4
TP1
(GND)
+
−
Digital frequency counter

13. Block Diagram

14. Schematic Diagram

(All schematic diagrams may be modified at any time with the development of new technology)

Note :

S602
Tape Eject switch

S701
Reset switch

S901
CD Play switch

S902
Tape Play switch

S903
Tuner switch

S904
FF switch

S905
Stop switch

S906
REW switch

S907
Power switch

S908
REC switch

S909
Preset EQ switch

S910

S. Virtualizer switch

S912
CD Open/Close switch

S971
Mode switch

S972
Half switch

S973
CR02 switch

S975
Recinh_F switch

VR900
Volume VR

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

No mark
: Playback

<< >>
: Rec

(( ))
: CD

< >
: FM

( )
: AM

- Importance safety notice :
Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified

parts shown in the parts list.

Caution !

IC, LSI and VLSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

- **Cover the parts boxes made of plastics with aluminium foil.**
- **Put a conductive mat on the work table.**
- **Ground the soldering iron.**
- **Do not touch the pins of IC, LSI or VLSI with fingers directly.**

15. Printed Circuit Board

16. Wiring Connection Diagram

17. Illustration of IC’s, Transistors and Diodes

18. Terminal Function of IC's

18.1. IC1 (LA1833NMNTLM) : IF & MPX IC (TUNER)

Pin No.	Mark	I/O	Function
1	FM IF In	-	D signal det. capacitor connection terminal
2	AM MIX out	O	Laser amp output terminal
3	REG	I	Photo diode light quantity det. input terminal
4	AM IF In	I	Laser amp reverse input terminal
5	GND	I	AMC amp criterion voltage input terminal
6	SD	I	Temperature sensor amp input terminal
7	ST	O	Temperature sensor amp output terminal
8	FM DET	O	ADIP signal output terminal
9	Vcc	I	Tracking error offset adjustment terminal
10	STRQ	I	Tracking balance adjustment terminal
11	FM/AM	O	Tracking error signal output terminal

Pin No.	Mark	I/O	Function
12	Mono	I	Track cross input terminal
13	Lch	I	Tracking gain adjustment input terminal
14	Rch	O	Lens position signal output terminal
15	PILOT OUT	I	APP compensation signal gain adjustment terminal
16	MPX IN	O	Focus error signal output terminal
17	PILOT IN	I	As gain adjustment terminal
18	DET OUT	I	Focus balance adjustment terminal
19	AM OUT	O	AS/3TMON signal output terminal
20	AGC	I	3T envelope det. capacitor connection terminal
21	AM RF IN	O	BDO/Track cross signal output terminal
22	AFC	O	BDO detection capacitor connection terminal
23	OSC	O	Off track detection signal output terminal
24	OSC OUT	-	GND terminal

18.2. IC2 (LC72131MDTRM) : PLL IC (TUNER)

Pin No.	Mark	I/O	Function
1	Xin	-	3.3V external transistor control terminal (Not used, open)
2	CE	-	3.3V regular output monitor terminal (Not used, connected to GND)
3	DI	-	Not used, open
4	CL	O	Op-amp output terminal
5	DO	O	Op-amp invert output terminal
6	AM	O	Op-amp non-invert output terminal (Not used, connected to GND)
7	LW	I	Power supply terminal
8	SDC	O	1/2 PVcc output terminal 1 (Connected to GND through capacitor)
9	STRQ	I	Power supply terminal for driver
10	FM	-	GND terminal
11	IFIN	O	Tracking coil driver output terminal
12	MONO	O	Tracking coil driver output terminal
13	AMIN	O	Focus coil driver output terminal
14	FMIN	O	Focus coil driver output terminal
15	VDD	O	Traverse motor drive output terminal
16	PD	O	Traverse motor drive output terminal
17	AIN	O	Spindle motor drive output terminal
18	AOUT	O	Spindle motor drive output terminal
19	VSS	-	GND terminal
20	XOUT	I	Power supply terminal

18.3. IC701 (AN22004A-NF) Servo Amplifier

Pin No.	Mark	I/O	Function
1	LPD	I	APC Amp input terminal
2	LD	O	APC Amp. output terminal
3	VCC	I	Power source terminal
4	EQSW	-	Equalizer switch terminal
5	RFOUT	O	RF summing Amp output terminal
6	RFIN	I	AGC input terminal
7	AGC	-	AGC loop filter connecting capacitor terminal
8	AGC	O	AGC output terminal
9	HPF-AMP	-	HPF Amp connecting capacitor terminal
10	3TOUT	O	3TOUT output terminal
11	HPFDET	-	Detection system's HPF connecting capacitor terminal
12	OFTCNT	-	PFTR detection level adjustment terminal
13	BDO	O	BDO output terminal
14	OFTR	O	OFTR output terminal
15	/RFDET	O	NRFDET output terminal
16	LDON	-	LDON terminal
17	GND	-	Earth terminal
18	EQBST	-	Equalizer boost adjustment terminal
19	VREF	O	VREF output terminal
20	TEN	I	Amp inverting input terminal
21	TEOUT	O	TE amp output terminal
22	FEN	I	Amp inverting input terminal
23	FEOUT	O	FE amp output terminal
24	GCTL	-	GCTL terminal
25	FBAL	I	FBAL control terminal
26	TBAL	I	TBAL control terminal
27	E	O	Tracking signal input terminal 1
28	F	O	Tracking signal input terminal 2
29	D	O	Tracking signal input terminal 4
30	B	O	Tracking signal input terminal 2

			terminal 2

Pin No.	Mark	I/O	Function
31	C	O	Tracking signal input terminal 3
32	A	O	Tracking signal input terminal 1

18.4. IC702 (MN662790RSC) SERVO PROCESSOR / DIGITAL SIGNAL PROCESSOR / DIGITAL FILTER / D/A CONVERTER

Pin No.	Mark	I/O	Function
1	BCLK	O	Bit Clock Output for Serial Data
2	LRCK	O	L/P Clock Signal Output
3	SRDATA	O	Serial Data Output
4	DVDDa	I	Power Supply Input (for Digital Circuit)
5	DVSS1	I	Ground (for Digital Circuit)
6	TX	O	Digital Audio Interface Signal Output (Latches Data at first Transition)
7	MCLK	I	Microprocessor Command Clock Signal Input
8	MDATA	I	Microprocessor Command Data Signal Input
9	MLD	I	Microprocessor Command Load Signal Input
10	SENSE	I	Sense Signal Output (OFT, FESL, MAGEND, NAJEND, POSAD, SFG) (Not Used, Open)
11	/FLOCK	O	Focus Servo Feeding Signal Output (“L”: Feed)
12	/TLOCK	O	Tracking Servo Feeding Signal Output (“Leafed)
13	BLKCK	O	Sub-Code Block Clock Signal Output (fabled = 75Hz during Normal Playback)

Pin No.	Mark	I/O	Function
14	SQCK	I	External Clock Signal Input for Sub-Code Q Resistor)
15	SUBQ	O	Sub-Code Q Code Output
16	DMUTE	I	Muting Input (“H”: Mute)
17	STAT	O	Status Signal Output (CRC, CUE, CLVS, TTSTVP, FCLV, SQCK)
18	/RST	I	Reset Signal Input
19	SMCK	O	1/2 - Divided Clock Signal of Crystal Oscillating at MSEL= “H” (fSMCK=8.4672 MHz) 1/4 - Divided Clock Signal of Crystal Oscillating at MSEL= “L” (fSMCK=4.2336 MHz)
20	CSEL	I	Frequency Selection Terminal H = 33.8688 MHz; L = 16.9344 MHz
21	TRV	O	Traverse Forced Feed Output
22	TVD	O	Traverse Drive Output
23	PC	O	Traverse (Spindle) Motor ON Signal Output (“L”: ON)
24	ECM	O	Spindle Motor Drive Signal Output (Forced Mode Output)
25	ECS	O	Spindle Motor Drive Signal Output. (Servo Error Signal Output)
26	KICK	O	Kick Pulse Output
27	TRD	O	Tracking Drive Output
28	FOD	O	Focus Drive Output
29	VREF	I	D/A (Drive) Output (TVD, ECS, TRD, FOD, FBAL, TBAL) Reference Voltage Input
30	FBAL	O	Focus Error Signal Input (Analog Input)

Pin No.	Mark	I/O	Function
31	TBAL	O	Tracking Balance Adjustment Output
32	FE	I	Focus Error Signal Input (Analog Input)
33	TE	I	Tracking Error Signal Input (Analog Input)
34	RFENV	I	RF Envelope Signal Input
35	VDET	I	Vibration Detection Signal Input (“H”: Detect)
36	OFT	I	Off-Track Signal Input (“H”: Off Track)
37	TRCRS	I	Track Cross Signal Input
38	/RFDET	I	RF Detection Signal Input (“L”: Detect)
39	BDO	I	Dropout Signal Input (“H”: Dropout)
40	LDON	O	Laser on Signal Output (“H”: ON)
41	PLLF2	I/O	PLL Loop Filter Characteristic Switching Terminal
42	TOFS/ DSLF2	O	Tracking Offset Alignment Output/DSL Balance Output (DA Output)
43	WVEL	O	Double Speed Status Signal Output (“H”:DS)
44	ARF	I	RF Signal Input
45	IREF	I	Reference Current Input
46	DRF	I	DSL Bias Terminal
47	DSLF	I/O	DSL Loop Filter
48	PLLF	I/O	PLL Loop Filter
49	VCOF	I/O	VCO Loop Filter Terminal
50	AVDD2	I	Power Supply Input (For Analog Circuit)
51	AVSS2	I	GND (For Analog Circuit)
52	EFM	O	EFM Signal Output (Not Used, Open)

			[illegible]

Pin No.	Mark	I/O	Function
53	PCK	O	PLL Extraction Clock Output (Not Used, Open) (FEPC= 4.3218 MHz during Normal Playback)
54	VCOF2	I/O	VCO loop filter for 33.8688 MHz Conversion Terminal for 16.9344 MHz Crystal mode, Must use other circuit
55	SUBC	O	Sub-Code Serial Data Output (Not Used, Open)
56	SBCK	I	Clock Input for Sub-Code Serial Data
57	Vs.	I	GND
58	X1 IN	I	Crystal Oscillating Circuit Input (f= 16.9344 MHz)
59	X2 OUT	O	Crystal Oscillating Circuit Input (f= 16.9344 MHz)
60	VDD	I	Power Supply Input (For Oscillating Circuit)
61	BYTCK	O	Byte Clock Output (Not Used, Open)
62	/CLDCK	O	Sub-Code Frame Clock Signal Output (fleck= 7.35 kHz During Normal Playback)
63	FCLK	O	Crystal Frame Clock Signal Output) (fleck= 7.35 kHz)
64	IPFLAG	O	Interpolation Flag Output (“H”: Interpolation) (Not Used, Open)
65	FLAG	O	Flag Output (Not Used, Open)
66	CLVS	O	Spindle Servo Phase Synchronizing Signal Output (“H”: CLV, “L”: Rough Servo) (Not used, Open)

Pin No.	Mark	I/O	Function
67	CRC	O	Sub-Code CRC Checked Output (“H”: OK, “L” NG) (Not Used, Open)
68	DEMPH	O	De-Emphasis DN Signal Output (“H”: ON)
69	RESY	O	Frame Re-synchronizing Signal Output
70	IOSEL	I	Mode Switching terminal
71	/TEST	I	Test Input
72	AVDD1	I	Power Supply Input (For Analog Circuit)
73	OUTL	O	Left Channel Audio Signal Output
74	AVSS1	I	GND
75	OUTR	O	Right SIgnal Audio Signal Output
76	RSEL	I	RF Signal Polarity Assignment Input (at “H” level, RSEL= “H”, at “L” SEL= “L”)
77	IOVDD	I	5V Supply
78	PSEL	I	Test Terminal (Connected to GND)
79	MSEL	I	SMCK Oscillating Frequency Designation Input (“L”: 4.2336 MHz, “H” 8.4672MHz)
80	SSEL	I	SUBQ Output Mode Select (“H”: Q-Code Buffer Mode)

18.5. IC703 (BA5948FPE2) FOCUS COIL / TRACKING COIL / TRAVERSE MOTOR / SPINDLE MOTOR DRIVE

Pin No.	Mark	I/O	Function
1	IN2	I	Motor Driver 92 Input
2	PC2	I	Turntable Motor Drive Signal ("L":ON)
3	IN1	I	Motor Driver (1) Input
4	PC1	-	Traverse Motor Drive Signal ("L":ON)
5	N.C.	-	No Connection
6	N.C.	-	No Connection
7	N.C.	-	No Connection
8	N.C.	-	No Connection
9	PGND1	-	Ground Connection (1) for Driver
10	PVCC1	I	Power Supply (1) for Driver
11	D1-	O	Motor Driver (1) reverse - action output
12	D1+	O	Motor Driver (1) forward - action output
13	D2-	O	Motor Driver (2) reverse - action output
14	D2+	O	Motor Driver (1) forward - action output
15	D3-	O	Motor Driver (3) reverse - action output
16	D3-	O	Motor Driver (3) forward - action output
17	D4-	O	Motor Driver (4) reverse - action output
18	D4+	O	Motor Driver (4) forward - action output
19	PVCC2	I	Power Supply (2) for Driver
20	PGND2	-	Ground Connection (2) for Driver
21	N.C.	NC	No Connection
22	N.C.	NC	No Connection
23	N.C.	NC	No Connection
24	N.C.	NC	No Connection
25	VCC	I	Power Supply Terminal
26	VREF	I	Reference Voltage Input
27	IN4	I	Motor Driver (4) Input

27	IN4	I	Motor Driver (4) Input

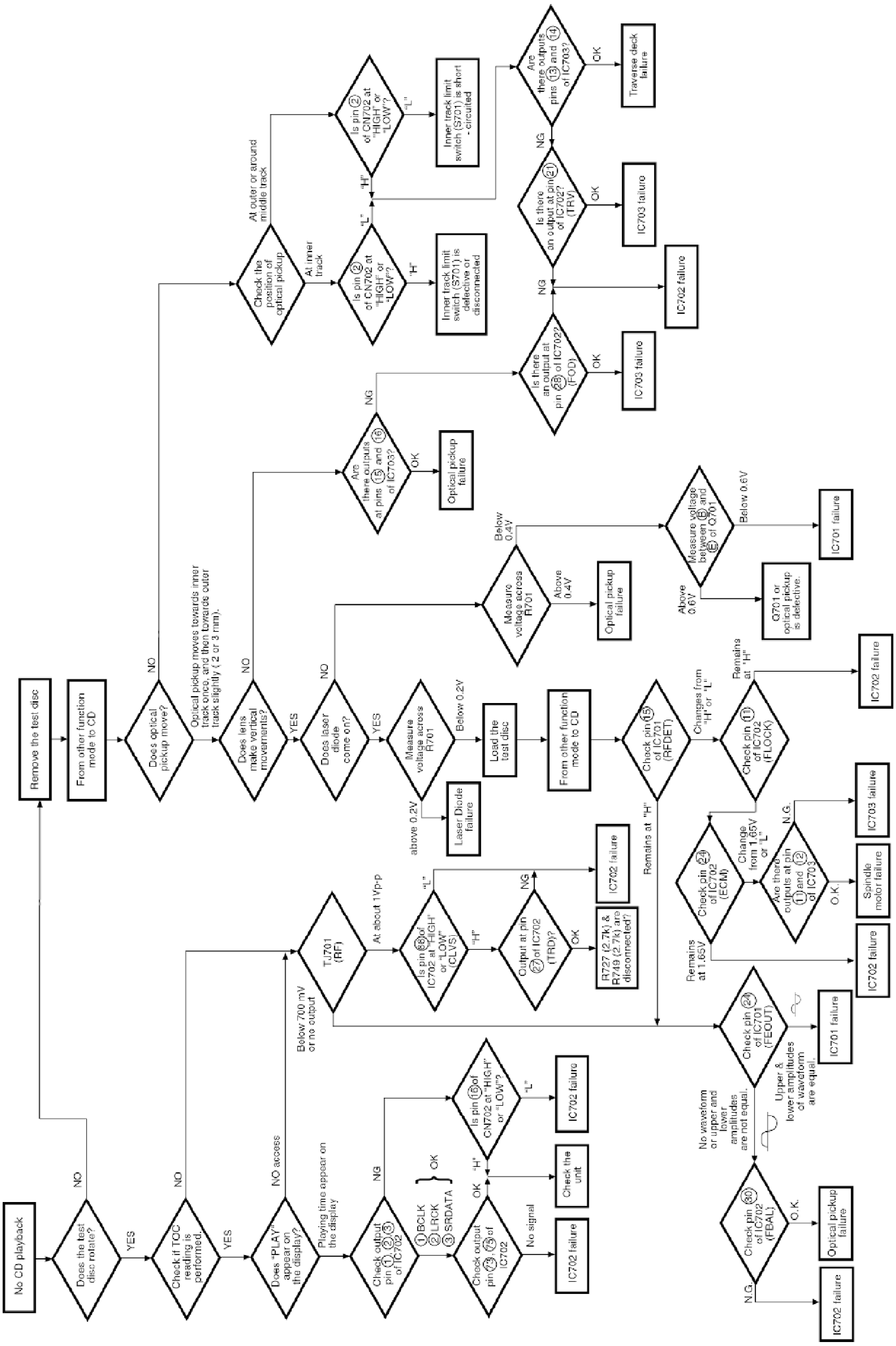
Pin No.	Mark	I/O	Function
27	IN3	I	Motor Driver (3) Input

18.6. IC901 (MN101C57DAA) MICRO PROCESSOR

Pin No.	Mark	I/O	Function
1	VLC1	-	LCD Bias
2	VLC2	-	LCD Bias
3	VLC3	-	LCD Bias
4	N.C.	-	No Connection
5	N.C.	-	No Connection
6	DMT	O	Deck mute output
7	/MUTEA	O	Audio mute output
8	PCONT	O	Power Control Output
9	MBP1	O	Micro-P Beat Proof Control output 1
10	MBP2	O	Micro-P Beat Proof Control output 2
11	VSS	-	Ground
12	OSC1	I	6.0 MHz Ceramic OSC Input
13	OSC2	O	6.0 MHz Ceramic OSC Output
14	MMOD	I	Microprocessor Mode Set to “L”
15	X1	I	32.687kHz OSC Input
16	X0	O	32.687kHz OSC Output
17	VDD	-	VDD (+5V)
18	NRST	I	System Reset Input
19	VDD	-	VDD (+5V)
20	N.C.	-	No Connection
21	SUBQ	I	CD subdued data input
22	SQCK	O	CD subdued data Clk
23	MCLK/ PLLCLK	O	CD Sign Processor Ctrl Clk/ PLL Clock Output
24	RDS_DATA	I/O	RDS IC control
25	RDS_CLK	I/O	RDS CLK IN
26	PLLCE	O	PLL Chip Enable
27	PLL_DO	I	PLL IF Count Input
28	MDATA/ PLLDA	O	CD SIG Processor CTRL DAT/PLL Data Output

Pin No.	Mark	I/O	Function
29	MLD	O	CD Signal Processor Ctrl Load
30	SD	I/O	Tuner Signal Detect
31	PL_H	O	Deck Plunger
32	CD_RST	O	CD RST Output
33	HALT	I	AC Failure Detect Signal
34	RMT_IN	I	Remote Control Input
35	BLKCK	I	CD Subcode BLK CLK
36	CD_OPEN_SW	I	CD Open Switch
37	STAT	I	CD Status Input
38	Rest_Sw	I	CD limit sw input for the most inner point
39	VDD	-	VDD (+5V)
40	VREF+	-	Vref (+5V)
41	KEY1	I	Key input 1
42	KEY2	I	Key input 2
43	VOL_JOG	I	Volume jog A_D detection input
44	REGION	I	Region Setting Input
45	AN4	I	MODE and TPS
46	BP	O	Beat Proof for AM
47	PDET	I	Power Supply Vol Detect
48	AN7	I	Half and RECINF
49	VREF(-)	-	Vref (-)
50	REC_H	O	Deck Rec Control O/P
51	Dimmer	O	Dimmer for LCD
52	SP_CLK/ E_CLK	O	Sound Processor Serial Clk
53	SP_DATA/ E_DATA	O	Sound Processor Serial Data/ EEPROM Data
54	CD_OPEN	O	CD Open Output
55	CD_CLOSE	O	CD Close Output
56	E_CS	O	EEPROM Chip Select
57	MOTOR_H	O	Deck Motor Control O/P
58	PHOTO_1	I	Deck Photo SW Input
59~96	SEG37~SEG0	-	Segment Driver
97	COM3	-	Segment Driver
98	COM2	-	Segment Driver
99	COM1	-	Segment Driver
100	COM0	-	Segment Driver

19. Troubleshooting Guide


No CD playback
Does the test disc rotate?
YES
NO
Remove the test disc
From other function mode to CD
Does optical pickup move?
NO
Optical pickup moves towards inner track once, and then towards outer track slightly (2 or 3 mm).
Check the position of optical pickup
At outer or around middle track
At inner track
Is pin ② of CN702 at "HIGH" or "LOW"?
"L"
"H"
Inner track limit switch (S701) is short - circuited
Inner track limit switch (S701) is defective or disconnected
Are there outputs pins ⑬ and ⑭ of IC703?
OK
NG
Traverse deck failure
Is there an output at pin ㉑ of IC702? (TRV)
IC703 failure
IC702 failure
Is there an output at pin ㉘ of IC702? (FOD)
IC703 failure
Does lens make vertical movements?
NO
YES
Are there outputs at pins ⑮ and ⑯ of IC703?
Optical pickup failure
Does laser diode come on?
NO
YES
Measure voltage across R701
Below 0.4V
Above 0.4V
Optical pickup failure
Measure voltage between Ⓑ and Ⓔ of Q701
Below 0.6V
Above 0.6V
IC701 failure
Q701 or optical pickup is defective.
Measure voltage across R701
Below 0.2V
above 0.2V
Laser Diode failure
Load the test disc
From other function mode to CD
Check pin ⑮ of IC701 (RFDET)
Changes from "H" or "L"
Remains at "H"
Check pin ⑪ of IC702 (FLOCK)
Remains at "H"
IC702 failure
Check pin ㉔ of IC702 (ECM)
Change from 1.65V or "L"
Remains at 1.65V
Are there outputs at pin ⑪ and ⑫ of IC703
N.G.
O.K.
IC703 failure
Spindle motor failure
IC702 failure
Check if TOC reading is performed.
NO
YES
TJ701 (RF)
At about 1Vp-p
Below 700 mV or no output
Is pin ㉖ of IC702 at "HIGH" or "LOW" (CLVS)
"L"
"H"
IC702 failure
Output at pin ㉗ of IC702 (TRD)?
NG
OK
R727 (2.7k) & R749 (2.7k) are disconnected?
Check pin ㉔ of IC701 (FEOUT)
IC701 failure
No waveform or upper and lower amplitudes are not equal.
Upper & lower amplitudes of waveform are equal.
Check pin ㉚ of IC702 (FBAL)
O.K.
N.G.
Optical pickup failure
IC702 failure
Does "PLAY" appear on the display?
NO access
Playing time appear on the display
Check output pin ①, ②, ③ of IC702
NG
OK
① BCLK
② LRCK
③ SRDATA
Is pin ⑯ of CN702 at "HIGH" or "LOW"?
"L"
"H"
IC702 failure
Check the unit
Check output pin ㉓, ㉕ of IC702
OK
No signal
IC702 failure

20. Parts Location and Replacement Parts List

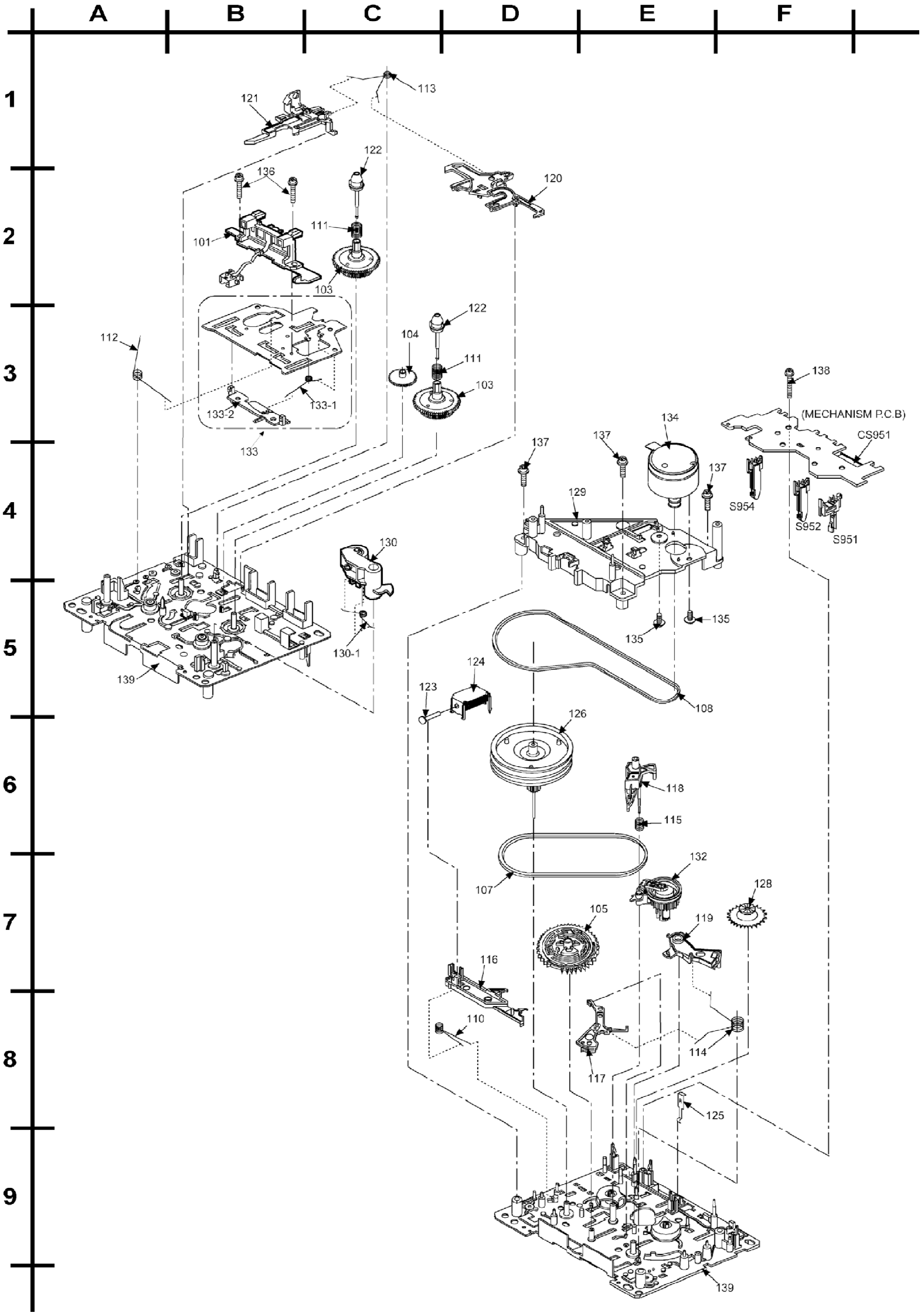
Notes:

- **Important safety notice:**
  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.
  When replacing any of these components, be sure to use only manufacturer’s specified parts shown in the parts list.
- **The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)**
  Parts without these indications can be used for all areas.
- **Warning: This product uses a laser diode. Refer to caution statements on page 5.**
  ACTUNG:
- **Die Lasereinheit nicht zerlegen.**
- **Die Lasereinheit darf nur gegen eine vom Hertsteller spezifizierte Einheit ausgetauscht werden.**
- **Capacitor values are in microfarads (μ F) unless specified otherwise, P= Pico-farads (pF), F= Farads.**
- **Resistance values are in ohms, unless specified otherwise, 1K= 1,000 (OHM).**
- **The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.**
- **[M] Indicates in the Remarks columns indicates parts supplied by MESA.**
- **The “(SF)” mark denotes the standard part.**
- **Reference for O/I book languages are as follows:**

Ar:	Arabic	Du:	Dutch	It:	Italian	Sp:	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	Sw:	Swedis
Cz:	Czech	Fr:	French	Po:	Polish	Co:	Traditio Chinese
Da:	Danish	Ge:	German	Ru:	Russian	Cn:	Simplifi Chinese

20.1. Deck Mechanism

20.1.1. Deck Mechanism Parts Location (RAA4402-S)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(MECHANISM P.C.B)
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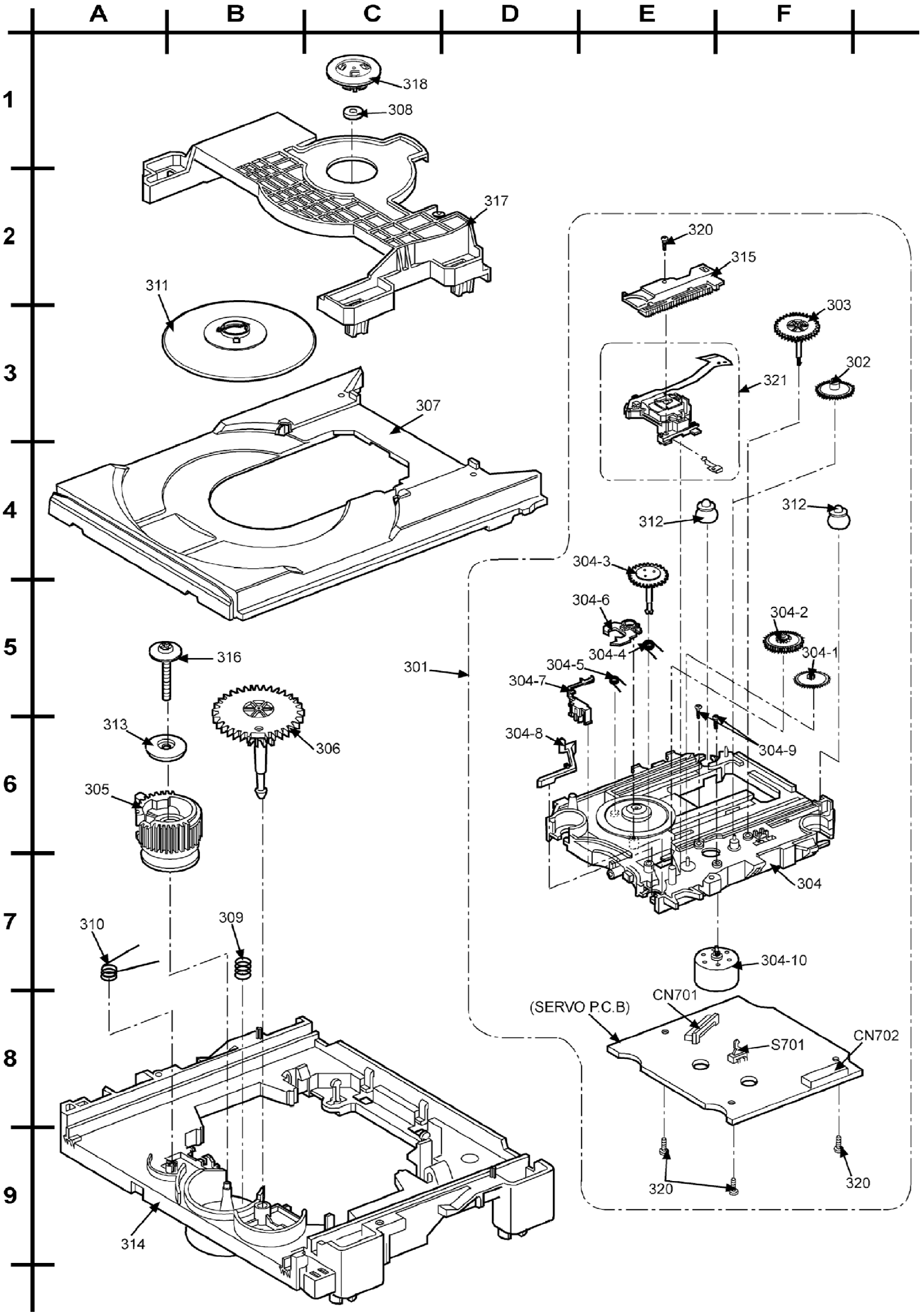
20.1.2. Deck Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CASSETTE DECK	
101	RED0067	R/P HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026	MAIN GEAR	[M]
107	RDV0033-4	WINDING BELT	[M]
108	RDV0064	CAPSTAN BELT	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAB PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406	FR LEVER SPRING	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372	WINDING LEVER	[M]
119	RML0374	EJECT LEVER	[M]
120	RMM0131	BRAKE ROD	[M]
121	RMM0133	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RXQ0470	PLUNGER	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0061	FLYWHEEL F ASSY	[M]
128	RXG0040	FF RELAY GEAR ASSY	[M]
129	RMK0283A-J	SUB-CHASSIS	[M]
130	RXL0124	PINCH ROLLER F ASSY	[M]
130-1	RMB0401	PINCH ARM SPRING F	[M]
132	RXL0126	WINDING ARM ASSY	[M]
133	RXQ0412	HEAD PANEL ASSY	[M]
133-1	RMB0405	FR ROD SPRING	[M]
133-2	RMM0132	FR ROD	[M]
134	REM0098	CAP MOTOR ASSY	[M]
135	RHD26022	MOTOR SCREW	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCRE	[M]
137	XTW26+10S	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17	PCB EARTH SCREW	[M]
139	RFKJSTR280PP	CHASSIS ASS'Y	[M]

20.2. CD Loading Mechanism

20.2.1. CD Loading Mechanism Parts Location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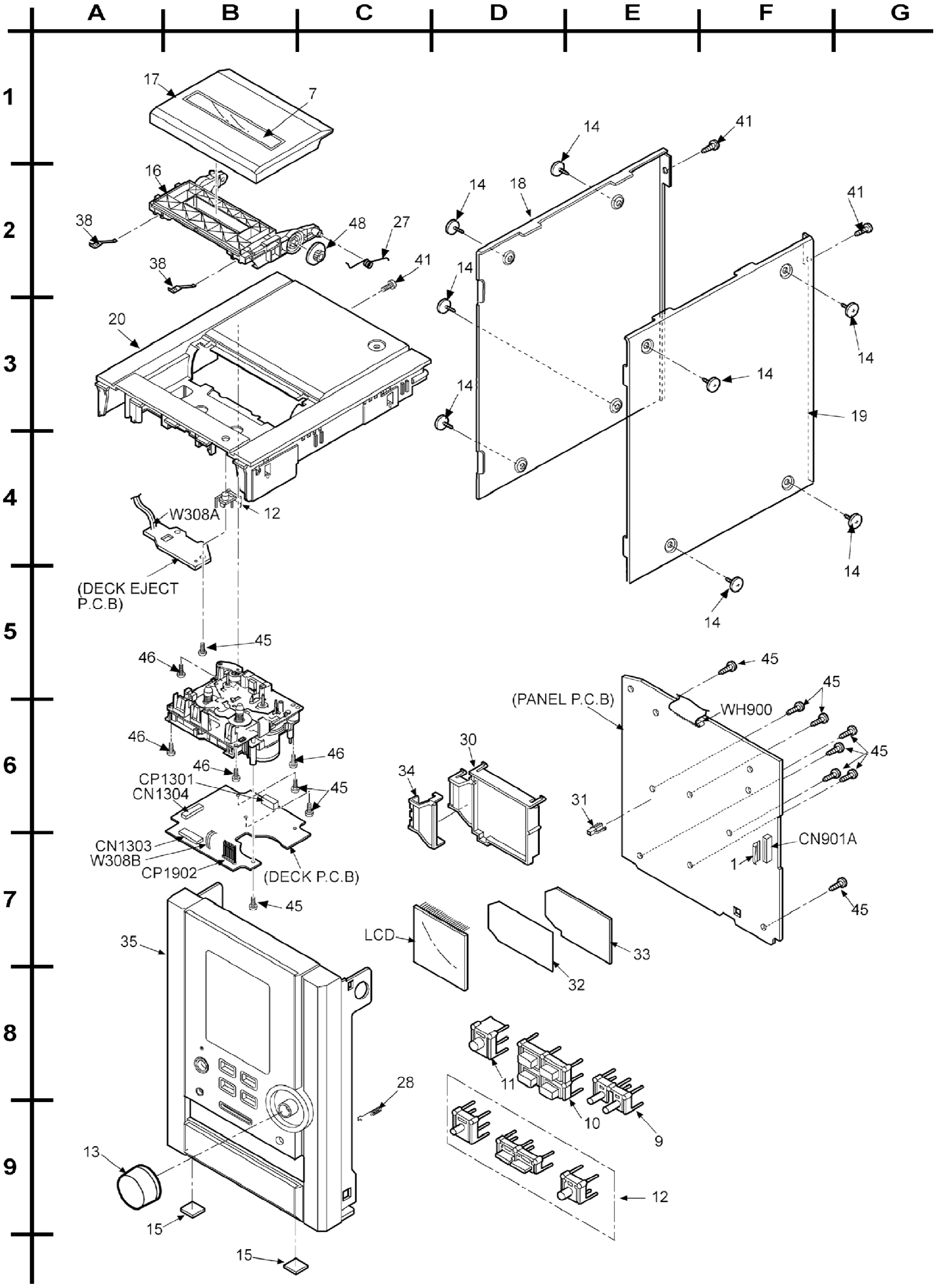
304-10
(SERVO P.C.B)
CN701
S701
CN702
320
320
314

20.2.2. CD Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	RAE0157Z-V	CT100W TRAVERSE	[M]
302	RDG0455	TRAVERSE GEAR (A)	[M]
303	RDG0456	TRAVERSE GEAR (B)	[M]
304	RFKNCT100	TRAVERSE BASE ASS’Y	[M]
304-1	RDG0457	LOAD GEAR (A)	[M]
304-2	RDG0458	LOAD GEAR (B)	[M]
304-3	RDG0459	LOAD GEAR (C)	[M]
304-4	RME0369	PRESS SPRING	[M]
304-5	RME0291	LOCK SPRING	[M]
304-6	RML0551	TRG LEVER	[M]
304-7	RML0552	LOCK LEVER	[M]
304-8	RMM0219	STOPPER	[M]
304-9	XQN17+C28F	SCREW	[M]
304-10	RXQ0632	TRV MOTOR UNIT	[M]
305	RDG0460	CAM GEAR	[M]
306	RDG0461	DRIVE GEAR	[M]
307	RGQ0254-K	TRAY	[M]
308	RHM0001	MAGNET	[M]
309	RMB0603	FLOATING SPRING	[M]
310	RME0288	CENTERING SPRING	[M]
311	RFKNXED50-S	CLAMPER HOLDER ASS’Y	[M]
312	RMG0510-K	FLOATING RUBBER (A)	[M]
313	RMG0511-K	FLOATING RUBBER (B)	[M]
314	RMK0422	MECHA CHASSIS	[M]
315	RMM0218	TRAVERSE DRIVE RACK	[M]
316	RHD30083	CAM. GEAR SCREW	[M]
317	RMR1223-K	CLAMP PLATE	[M]
318	RMR1242-X1	FIXTURE	[M]
320	XTN2+6G	SCREW	[M]
321	RXQ0999	OPU UNIT	[M]

20.3. Cabinet

20.3.1. Cabinet Parts Location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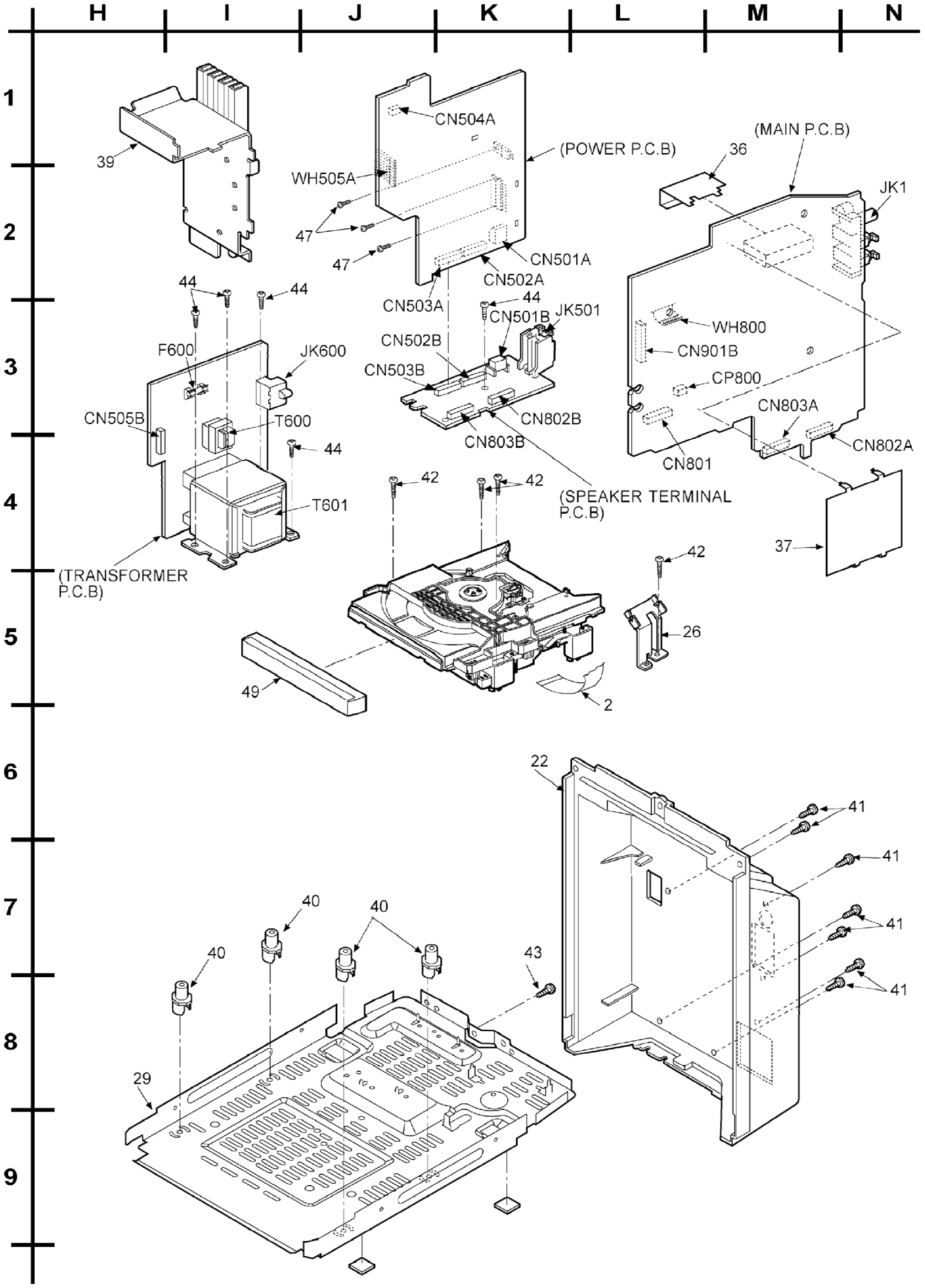
W308A
(DECK EJECT P.C.B)
CP1301
CN1304
CN1303
W308B
CP1902
(DECK P.C.B)
(PANEL P.C.B)
WH900
CN901A
LCD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CN504A
WH505A
(POWER P.C.B)
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47
CN501A
CN502A
CN503A
(MAIN P.C.B)
36
JK1
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44
44
CN501B
JK501
F600
JK600
CN502B
CN503B
WH800
CN901B
CP800
CN803A
CN802A
CN801
CN505B
T600
44
CN802B
CN803B
42
42
(SPEAKER TERMINAL P.C.B)
T601
(TRANSFORMER P.C.B)
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20.3.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	REEV0016	27P FFC	[M]
2	REEV0017	19P FFC	[M]
7	RGPV0008-S	CASS.ORNAMENT	[M]
9	RGUV0006-S	FUNCTION BUTTON	[M]
10	RGUV0008-S	MAIN CENTRAL BUTTON	[M]
11	RGUV0009-S	POWER BUTTON	[M]
12	RGUV0010-S	FAMILY BUTTON	[M]
13	RGWV0001-S	VOLUME KNOB	[M]
14	RHD30007-1S	SCREW	[M]
15	RHGV0008	LEG CUSHION	[M]
16	RKF0479-1H	CASS HOLDER	[M]
17	RKFV0001-S	CASS. LID	[M]
18	RKM0445-1S	SIDE PANEL (L)	[M]
19	RKM0446-1S	SIDE PANEL (R)	[M]
20	RKMV0003-S	TOP CABINET	[M]
22	RKSV0002A-H	REAR CABINET	[M]E
22	RKSV0002B-H	REAR CABINET	[M]EB
22	RKSV0002-H	REAR CABINET	[M]EG
26	RMAV0001	MAIN PCB SUPPORT	[M]
27	RMB0617	CASS OPEN SPRING	[M]
28	RMBV0001	EARTH SPRING	[M]
29	RMK0498	BTM CHASSIS	[M]
30	RMNV0004	LCD HOLDER	[M]
31	RMNV0006	AC LED HOLDER	[M]
32	RMRV0002	LCD DIFUSSER SHEET	[M]
33	RMRV0003	LCD LIGHTING PANEL	[M]
34	RMVV0017	LCD LIGHTING COVER	[M]
35	RFKGAPM10EBS	FRONT PANEL ASS’Y	[M]
36	RSCV0001	TUNER SHIELD (FRONT)	[M]
37	RSCX0056	TUNER ANTENNA SHIELD	[M]
38	RUS757ZAA	CASS HALF SPRING	[M]
39	RXXV0003	HEAT SINK UNIT	[M]
40	SHE187-4J	POWER PCB SUPPORT	[M]
41	XTB3+10JFZ	SCREW	[M]
42	XTB3+20JFZ	SCREW	[M]
43	XTB3+8JFR1	SCREW	[M]
44	XTB3+8JFZ	SCREW	[M]
45	XTBS26+10J	SCREW	[M]
46	XTV3+10G	SCREW	[M]
47	XTV3+8F	SCREW	[M]
48	RDG0357	DAMPER GEAR	[M]
49	RFKLAPM10EBS	CD LID ASS’Y	[M]

20.4. Electrical Part List

Ref. No.	Part No.	Part Name & Description	Remarks
		PRINTED CIRCUIT BOARD	
	REPX0362A	CD SERVO P.C.B.	[M](RTL)
	REPX0004A	MAIN P.C.B.	[M](RTL)
	REPV0003A	PANEL P.C.B.	[M](RTL)
	REPX0350C	DECK P.C.B.	[M](RTL)
	REPX0321H	DECK MECHANISM P.C.B.	[M](RTL)
	REPV0005A	SPEAKER TERMINAL P.C.B.	[M](RTL)E/EG
	REPV0005B	SPEAKER TERMINAL P.C.B.	[M](RTL)EB
	REPV0005A	HEADPHONE P.C.B.	[M](RTL)E/EG
	REPV0005B	HEADPHONE P.C.B.	[M](RTL)EB
	REPX0350C	TAPE EJECT P.C.B.	[M](RTL)
	REPV0005A	POWER P.C.B.	[M](RTL)E/EG
	REPV0005B	POWER P.C.B.	[M](RTL)EB
	REPV0005A	TRANSFORMER P.C.B.	[M](RTL)E/EG
	REPV0005B	TRANSFORMER P.C.B.	[M](RTL)EB
		INTEGRATED CIRCUITS	
IC1	LA1833NMNTLM	IC IF & MPX	[M]
IC2	LC72131MDTRM	IC PLL	[M]
IC501	AN7194K-LD	IC BTC POWER	[M]
IC701	AN22004A-NF	IC HEAD AMP	[M]
IC702	MN662790RSC	IC LSI	[M]
IC703	BA5948FPE2	IC 4 CH DRIVE	[M]
IC800	C1BB00000757	IC ASP	[M]
IC801	C1BB00000715	IC RDS	[M]
IC802	S81333HG-Z	IC REG	[M]
IC901	MN101C57DAA	IC MICRO PROCESSOR	[M]
IC971	CNB13030R2AU	IC PHOTO INTERRUPTOR	[M]
IC1000	C1AA00000612	IC ANALOG SW	[M]
IC1001	AN7326K	IC DECK R/P	[M]
		TRANSISTORS	
Q1	B1AAAD000014	TRANSISTOR	[M]
Q2	B1AAAD000014	TRANSISTOR	[M]
Q3	2SC3311ARTA	TRANSISTOR	[M]
Q6	KRA102MTA	TRANSISTOR	[M]
Q361	KTC3199GRTA	TRANSISTOR	[M]
Q362	KTC3202YTA	TRANSISTOR	[M]
Q500	KRA110MTA	TRANSISTOR	[M]
Q501	KTC3199GRTA	TRANSISTOR	[M]
Q502	2SD0592ARA	TRANSISTOR	[M]
Q503	KTA1046	TRANSISTOR	[M]
Q504	KTC3199GRTA	TRANSISTOR	[M]
Q505	KTC3199GRTA	TRANSISTOR	[M]
Q506	KTA1046	TRANSISTOR	[M]
Q600	KTC3199GRTA	TRANSISTOR	[M]
Q601	2SC3940ARA	TRANSISTOR	[M]
Q602	KRC102MTA	TRANSISTOR	[M]
Q701	2SA1037AKSTX	TRANSISTOR	[M]
Q800	KTA1266GRAT	TRANSISTOR	[M]
Q801	KRC104MTA	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q802	KRC102MTA	TRANSISTOR	[M]
Q803	KRC101MTA	TRANSISTOR	[M]
Q804	KRC101MTA	TRANSISTOR	[M]
Q805	KRC101MTA	TRANSISTOR	[M]
Q806	KTC3199GRTA	TRANSISTOR	[M]
Q900	KRC119STA	TRANSISTOR	[M]
Q901	KRC119STA	TRANSISTOR	[M]
Q902	KRC104STA	TRANSISTOR	[M]
Q903	2SC2712GRT5T	TRANSISTOR	[M]
Q904	2SC2712GRT5T	TRANSISTOR	[M]
Q1101	B1ABGC000005	TRANSISTOR	[M]
Q1201	B1ABGC000005	TRANSISTOR	[M]
Q1302	DTA114EKA146	TRANSISTOR	[M]
Q1303	DTC143XKA146	TRANSISTOR	[M]
Q1304	DTA143XKA146	TRANSISTOR	[M]
Q1305	DTC114EKA146	TRANSISTOR	[M]
Q1309	B1AAGC000006	TRANSISTOR	[M]
Q1310	B1AAGC000006	TRANSISTOR	[M]
Q1312	2SC2412KT96R	TRANSISTOR	[M]
Q1313	2SC2784FTA	TRANSISTOR	[M]
Q1314	DTA143XKA146	TRANSISTOR	[M]
Q1315	KTA12710YTA	TRANSISTOR	[M]
Q1316	2SD09650RA	TRANSISTOR	[M]
Q1317	B1ABGC000005	TRANSISTOR	[M]
		DIODES	
D1	B0BA5R000004	DIODE	[M]
D301	B0AACK000004	DIODE	[M]
D302	B0AACK000004	DIODE	[M]
D351	B0AACK000004	DIODE	[M]
D352	RB441Q40T77	DIODE	[M]
D353	B0BA5R000004	DIODE	[M]
D500	MTZJ16ATA	DIODE	[M]
D501	1N5402BM21	DIODE	[M]
D502	1N5402BM21	DIODE	[M]
D503	B0AACK000004	DIODE	[M]
D504	1N5402BM21	DIODE	[M]
D505	1N5402BM21	DIODE	[M]
D506	RL1N4003N02	DIODE	[M]
D507	RL1N4003N02	DIODE	[M]
D508	B0BA5R000004	DIODE	[M]
D511	B0AACK000004	DIODE	[M]
D600	B0AACK000004	DIODE	[M]
D601	RL1N4003N02	DIODE	[M]
D602	RL1N4003N02	DIODE	[M]
D603	RL1N4003N02	DIODE	[M]
D604	RL1N4003N02	DIODE	[M]
D605	RL1N4003N02	DIODE	[M]
D606	RL1N4003N02	DIODE	[M]
D607	B0BA6R800007	DIODE	[M]
D608	B0AACK000004	DIODE	[M]
D750	MAZ80560ML	DIODE	[M]
D801	MA2C700A0F	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D802	MA2C700A0F	DIODE	[M]
D900	SLI343YC3F	DIODE	[M]
D901	SLI343YC3F	DIODE	[M]
D902	SLI343YC3F	DIODE	[M]
D903	SLI343YC3F	DIODE	[M]
D904	SLI343YC3F	DIODE	[M]
D906	SLC-22VR	DIODE	[M]
D908	1SS380TE-17	DIODE	[M]
D909	1SS380TE-17	DIODE	[M]
D910	1SS380TE-17	DIODE	[M]
D911	1SS380TE-17	DIODE	[M]
D913	1SS380TE-17	DIODE	[M]
D971	MA2C16500E	DIODE	[M]
D1301	B0ACCK000005	DIODE	[M]
		VARIABLE RESISTORS	
VR900	EVEJ1CF3024B	VR VOLUME ENCORDER	[M]
		SWITCHES	
S602	EVQ21405RJ	SW TAPE EJECT	[M]
S701	RSH1A048-A	SW RESET	[M]
S901	EVQ21405RJ	SW CD PLAY	[M]
S902	EVQ21405RJ	SW TAPE PLAY	[M]
S903	EVQ21405RJ	SW TUNER	[M]
S904	EVQ21405RJ	SW FF	[M]
S905	EVQ21405RJ	SW STOP	[M]
S906	EVQ21405RJ	SW REW	[M]
S907	EVQ21405RJ	SW POWER	[M]
S908	EVQ21405RJ	SW REC	[M]
S909	EVQ21405RJ	SW PRESET EQ	[M]
S910	EVQ21405RJ	SW S. VIRTUALIZER	[M]
S912	EVQ21405RJ	SW CD OPEN/CLOSE	[M]
S971	RSH1A018-3U	SW MODE	[M]
S972	RSH1A019-2U	SW LEAF	[M]
S973	RSH1A019-2U	SW LEAF	[M]
S975	RSH1A019-2U	SW LEAF	[M]
		CONNECTORS	
CN501A	K1KA04B00058	CONNECTOR	[M]
CN501B	K1KB04A00035	B/B CONNECTOR	[M]
CN502A	RJU100W10	10P CONNECTOR	[M]
CN502B	RJT100W10	10P CONNECTOR	[M]
CN503A	RJU100W10	10P CONNECTOR	[M]
CN503B	RJT100W10	10P CONNECTOR	[M]
CN504A	K1MP05A00004	CONNECTOR	[M]
CN505B	RJT119W09V	9P CONNECTOR	[M]
CN701	RJS2A8616	16P FPC CONNECTOR	[M]
CN702	RJS1A9319	19P FFC CONNECTOR	[M]
CN801	K1MN19A00013	CONNECTOR	[M]
CN802A	RJU100W10	10P CONNECTOR	[M]
CN802B	RJT100W10	10P CONNECTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
CN803A	RJU100W10	10P CONNECTOR	[M]
CN803B	RJT100W10	10P CONNECTOR	[M]
CN901A	K1MN27A00010	27P FFC CONNECTOR	[M]
CN901B	K1MN27A00010	27P FFC CONNECTOR	[M]
CN1303	RJS1A5711	11P CONNECTOR	[M]
CN1304	RJS1A5709	9P CONNECTOR	[M]
CP800	REXX0230-1	2P MAIN TO CR120	[M]
CP1301	RJS1A6805-J	CONNECTOR	[M]
CP1902	K1KA09B00058	CONNECTOR	[M]
CS971	RJU071H09M1	CONNECTOR	[M]
		COILS & TRANSFORMERS	
L1	ELESNR68MA	CHOKE COIL	[M]
L2	ELESNR68MA	CHOKE COIL	[M]
L3	ELEXTR47MA9	CHOKE COIL	[M]
L600	ELF15N035AN	LINE FILTER	[M] ⚠
L801	G0C101JA0027	COIL	[M]
L802	J0JKB0000020	EMI BEAD CORE	[M]
L803	J0JKB0000020	EMI BEAD CORE	[M]
L807	G0C101JA0027	COIL	[M]
L900	G0C3R3JA0027	COIL	[M]
L901	G0C3R3JA0027	COIL	[M]
L1301	7L1A62N	BIAS OCS COIL	[M]
L1302	RLQB470JTD-D	RF CHOKE COIL	[M]
T600	G4C2AAJ00006	BACK UP TRANSFORMER	[M] ⚠
T601	G4C6ADH00001	POWER TRANSFORMER	[M] ⚠
		COMPONENT COMBINATION	
Z1	RLA2Z005-C	AM COIL	[M]
Z2	RL12Z021M-T	COIL	[M]
Z20	ENV17290G1Y	FM TUNER PACK	[M]
Z600	ERZV10V511CS	ZENER	[M] ⚠
Z900	L5ACAFF00001	LCD DISPLAY	[M]
Z901	B3RAB0000013	REMOTE SENSOR	[M]
		CERAMIC FILTERS	
CF1	J0B1075A0086	CERAMIC CAPACITOR	[M]
CF2	J0B1075A0077	CERAMIC FILTER	[M]
		RELAY	
RL600	K6B1ADA00011	RELAY	[M] ⚠
WH504B	RMR0314	CABLE HOLDER	[M]
WH505A	K1YF09000001	9P WIRE HOLDER	[M]
WH800	RMR0318	9P WIRE HOLDER	[M]
WH900	RMR0320	11P WIRE HOLDER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		OSCILLATORS	
X2	RLFDFT13DD	CERAMIC FILTER	[M]
X3	RSXD7M20C01	CRYSTAL OSCILLATOR	[M]
X701	H2A169500009	CERAMIC OSCILLATOR	[M]
X801	H0H433400001	CRYSTAL OSCILLATOR	[M]
X900	RSXD32K7S02	CRYSTAL OSCILLATOR	[M]
X901	RSXZ6M00D01T	6MHZ RESONATOR	[M]
		FUSES	
F600	K5Y630B00001	FUSE	[M] ⚠
		FUSE HOLDERS	
FC600	EYF52BC	FUSE HOLDER	[M]
FC601	EYF52BC	FUSE HOLDER	[M]
		FUSE PROTECTOR	
FP351	K5G502AA0003	FUSE PROTECTOR	[M] ⚠
		JACKS	
JK1	RJH8304N	JK ANTENNA	[M]
JK500	K2HC107A0003	JK HEADPHONE	[M]
JK501	K4BC04B00046	JK SPEAKER TERMINAL	[M]
JK600	K2AA2B000004	JK AC INLET	[M]
		EARTH TERMINAL	
E301	SNE1004-2	EARTH TERMINAL	[M]
		WIRES	
W308B	RWJ0102095SS	2P DECK-CASS EJECT	[M]
W504B	RWJ1105165XX	5P POWER/PHONE	[M]
W505A	REXV0006	9P POWER TO TRANS	[M]
W900	RWJ1111138XX	11P PANEL-DECK	[M]
W1903	RWJ0102050KR	MOTOR WIRE	[M]
		RESISTORS	
R2	ERDS2TJ472T	4.7K 1/4W	[M]
R3	ERDS2TJ101T	100 1/4W	[M]
R4	ERDS2TJ103T	10K 1/4W	[M]
R5	ERDS2TJ471T	470 1/4W	[M]
R6	ERDS2TJ474T	470K 1/4W	[M]
R7	ERDS2TJ331T	330 1/4W	[M]
R8	ERDS2TJ474T	470K 1/4W	[M]
R9	ERDS2TJ331T	330 1/4W	[M]
R10	ERDS2TJ562T	5.6K 1/4W	[M]
R11	ERDS2TJ391T	390 1/4W	[M]

R11	[illegible]	330 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R12	ERDS2TJ104T	100K 1/4W	[M]
R13	ERDS2TJ103T	10K 1/4W	[M]
R14	ERDS2TJ562T	5.6K 1/4W	[M]
R15	ERDS2TJ561T	560 1/4W	[M]
R16	ERDS2TJ102T	1K 1/4W	[M]
R17	ERDS2TJ683T	68K 1/4W	[M]
R18	ERDS2TJ472T	4.7K 1/4W	[M]
R19	ERDS2TJ123T	12K 1/4W	[M]
R20	ERDS2TJ473T	47K 1/4W	[M]
R21	ERDS2TJ223T	22K 1/4W	[M]
R22	ERDS2TJ272T	2.7K 1/4W	[M]
R23	ERDS2TJ683T	68K 1/4W	[M]
R24	ERDS2TJ271T	270 1/4W	[M]
R25	ERDS2TJ471T	470 1/4W	[M]
R26	ERDS2TJ152T	1.5K 1/4W	[M]
R27	ERDS2TJ471T	470 1/4W	[M]
R28	ERDS2TJ820T	82 1/4W	[M]
R29	ERDS2TJ273T	27K 1/4W	[M]
R30	ERDS2TJ103T	10K 1/4W	[M]
R31	ERDS2TJ680T	68 1/4W	[M]
R32	ERDS2TJ103T	10K 1/4W	[M]
R33	ERDS2TJ102T	1K 1/4W	[M]
R34	ERDS2TJ471T	470 1/4W	[M]
R35	ERDS2TJ102T	1K 1/4W	[M]
R36	ERDS2TJ102T	1K 1/4W	[M]
R37	ERDS2TJ102T	1K 1/4W	[M]
R38	ERDS2TJ332T	3.3K 1/4W	[M]
R39	ERDS2TJ332T	3.3K 1/4W	[M]
R40	ERDS2TJ472T	4.7K 1/4W	[M]
R41	ERDS2TJ102T	1K 1/4W	[M]
R42	ERDS2TJ102T	1K 1/4W	[M]
R43	ERDS2TJ223T	22K 1/4W	[M]
R45	ERDS2TJ104T	100K 1/4W	[M]
R46	ERDS2TJ104T	100K 1/4W	[M]
R201	ERDS2TJ682T	6.8K 1/4W	[M]
R202	ERDS2TJ183T	18K 1/4W	[M]
R203	ERDS2TJ272T	2.7K 1/4W	[M]
R204	ERDS2TJ682T	6.8K 1/4W	[M]
R206	ERDS2TJ103T	10K 1/4W	[M]
R209	ERDS2TJ183T	18K 1/4W	[M]
R210	ERDS2TJ102T	1K 1/4W	[M]
R211	ERDS2TJ394T	390K 1/4W	[M]
R212	ERDS2TJ392T	3.9K 1/4W	[M]
R213	ERDS2TJ123T	12K 1/4W	[M]
R214	ERDS2TJ822T	8.2K 1/4W	[M]
R215	ERDS2TJ392T	3.9K 1/4W	[M]
R216	ERDS2TJ682T	6.8K 1/4W	[M]
R251	ERDS2TJ821T	820 1/4W	[M]
R252	ERDS2TJ2R2T	2.2 1/4W	[M]
R253	ERDS2TJ2R2T	2.2 1/4W	[M]
R256	ERDS2TJ563T	56K 1/4W	[M]
R261	ERDS2TJ181T	180 1/4W	[M]
R262	ERDS2TJ102T	1K 1/4W	[M]
R301	ERD2FCVG330T	33 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R302	ERDS2TJ682T	6.8K 1/4W	[M]
R303	ERDS2TJ682T	6.8K 1/4W	[M]
R351	ERDS2TJ104T	100K 1/4W	[M]
R352	ERDS2TJ823T	82K 1/4W	[M]
R353	ERDS2TJ472T	4.7K 1/4W	[M]
R354	ERDS2TJ102T	1K 1/4W	[M]
R355	ERDS2TJ222T	2.2K 1/4W	[M]
R356	ERDS2TJ333T	33K 1/4W	[M]
R361	ERDS2TJ104T	100K 1/4W	[M]
R362	ERDS2TJ683T	68K 1/4W	[M]
R363	ERDS2TJ471T	470 1/4W	[M]
R401	ERDS2TJ682T	6.8K 1/4W	[M]
R402	ERDS2TJ183T	18K 1/4W	[M]
R403	ERDS2TJ272T	2.7K 1/4W	[M]
R404	ERDS2TJ682T	6.8K 1/4W	[M]
R406	ERDS2TJ103T	10K 1/4W	[M]
R409	ERDS2TJ183T	18K 1/4W	[M]
R410	ERDS2TJ102T	1K 1/4W	[M]
R411	ERDS2TJ394T	390K 1/4W	[M]
R412	ERDS2TJ392T	3.9K 1/4W	[M]
R413	ERDS2TJ123T	12K 1/4W	[M]
R414	ERDS2TJ822T	8.2K 1/4W	[M]
R415	ERDS2TJ392T	3.9K 1/4W	[M]
R416	ERDS2TJ682T	6.8K 1/4W	[M]
R451	ERDS2TJ821T	820 1/4W	[M]
R452	ERDS2TJ2R2T	2.2 1/4W	[M]
R453	ERDS2TJ2R2T	2.2 1/4W	[M]
R456	ERDS2TJ563T	56K 1/4W	[M]
R461	ERDS2TJ181T	180 1/4W	[M]
R462	ERDS2TJ102T	1K 1/4W	[M]
R500	ERD2FCVG220T	22 1/4W	[M]
R501	ERDS2TJ1R2T	1.2 1/4W	[M]
R502	ERDS2TJ1R2T	1.2 1/4W	[M]
R503	ERDS2TJ1R2T	1.2 1/4W	[M]
R504	ERDS2TJ181T	180 1/4W	[M]
R505	ERDS2TJ104T	100K 1/4W	[M]
R506	ERDS2TJ182T	1.8K 1/4W	[M]
R507	ERDS2TJ122T	1.2K 1/4W	[M]
R509	ERDS2TJ101T	100 1/4W	[M]
R510	ERDS2TJ221T	220 1/4W	[M]
R511	ERDS2TJ221T	220 1/4W	[M]
R513	ERDS2TJ223T	22K 1/4W	[M]
R514	ERDS2TG152T	1.5K 1/4W	[M]
R515	ERDS2TG152T	1.5K 1/4W	[M]
R517	ERDS2TJ102T	1K 1/4W	[M]
R518	ERDS2TJ561T	560 1/4W	[M]
R600	ERDS2TJ473T	47K 1/4W	[M]
R601	ERDS2TJ472T	4.7K 1/4W	[M]
R602	ERDS1FVJ180T	18 1/2W	[M]
R603	ERDS2TJ821T	820 1/4W	[M]
R605	ERDS2TJ151T	150 1/4W	[M]
R606	ERDS2TJ103T	10K 1/4W	[M]
R607	ERDS2TJ103T	10K 1/4W	[M]
R701	ERJ3GEYJ4R7V	4.7 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R702	ERJ3GEYJ103V	10K 1/16W	[M]
R704	ERJ3GEYJ102V	1K 1/16W	[M]
R705	ERJ3GEYJ393V	39K 1/16W	[M]
R706	ERJ3GEYJ102V	1K 1/16W	[M]
R707	ERJ3GEYJ154V	150K 1/16W	[M]
R708	ERJ3GEYJ154V	150K 1/16W	[M]
R709	ERJ3GEYJ473V	47K 1/16W	[M]
R711	ERJ3GEYJ823V	82K 1/16W	[M]
R712	ERJ3GEYJ221V	220 1/16W	[M]
R714	ERJ3GEY0R00V	0 1/16W	[M]
R715	ERJ3GEYJ102V	1K 1/16W	[M]
R717	ERJ3GEYJ102V	1K 1/16W	[M]
R718	ERJ3GEYJ102V	1K 1/16W	[M]
R721	ERJ3GEYJ101V	100 1/16W	[M]
R723	ERJ3GEYJ103V	10K 1/16W	[M]
R724	ERJ3GEYJ153V	15K 1/16W	[M]
R725	ERJ3GEYJ681V	680 1/16W	[M]
R727	ERJ3GEYJ272V	2.7K 1/16W	[M]
R728	ERJ3GEYJ222V	2.2K 1/16W	[M]
R729	ERJ3GEYJ272V	2.7K 1/16W	[M]
R731	ERJ3GEYJ103V	10K 1/16W	[M]
R732	ERJ3GEYJ102V	1K 1/16W	[M]
R735	ERJ3GEYJ101V	100 1/16W	[M]
R736	ERJ3GEYJ101V	100 1/16W	[M]
R741	ERJ3GEYJ473V	47K 1/16W	[M]
R742	ERJ3GEYJ224V	220K 1/16W	[M]
R744	ERJ3GEYJ393V	39K 1/16W	[M]
R749	ERJ3GEYJ272V	2.7K 1/16W	[M]
R750	ERJ3GEYJ103V	10K 1/16W	[M]
R751	ERJ3GEYJ472V	4.7K 1/16W	[M]
R753	ERJ3GEYJ100V	10 1/16W	[M]
R754	ERJ3GEYJ5R6V	5.6 1/16W	[M]
R800	ERDS2TJ103T	10K 1/4W	[M]
R801	ERDS2TJ152T	1.5K 1/4W	[M]
R806	ERDS2TJ102T	1K 1/4W	[M]
R807	ERDS2TJ102T	1K 1/4W	[M]
R808	ERDS2TJ104T	100K 1/4W	[M]
R809	ERDS2TJ102T	1K 1/4W	[M]
R810	ERDS2TJ103T	10K 1/4W	[M]
R811	ERDS2TJ472T	4.7K 1/4W	[M]
R812	ERDS2TJ472T	4.7K 1/4W	[M]
R813	ERDS2TJ472T	4.7K 1/4W	[M]
R814	ERDS2TJ103T	10K 1/4W	[M]
R815	ERDS2TJ472T	4.7K 1/4W	[M]
R816	ERDS2TJ103T	10K 1/4W	[M]
R817	ERDS2TJ472T	4.7K 1/4W	[M]
R818	ERDS2TJ103T	10K 1/4W	[M]
R819	ERDS2TJ103T	10K 1/4W	[M]
R820	ERDS2TJ101T	100 1/4W	[M]
R821	ERDS2TJ101T	100 1/4W	[M]
R822	ERDS2TJ104T	100K 1/4W	[M]
R823	ERDS2TJ472T	4.7K 1/4W	[M]
R824	ERDS2TJ104T	100K 1/4W	[M]
R825	ERDS2TJ562T	5.6K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R826	ERDS2TJ183T	18K 1/4W	[M]
R827	ERDS2TJ103T	10K 1/4W	[M]
R829	ERDS2TJ103T	10K 1/4W	[M]
R830	ERDS2TJ103T	10K 1/4W	[M]
R831	ERDS2TJ101T	100 1/4W	[M]
R833	ERDS2TJ681T	680 1/4W	[M]
R900	ERJ3GEYJ102V	1K 1/16W	[M]
R901	ERJ3GEYJ103V	10K 1/16W	[M]
R902	ERJ3GEYJ102V	1K 1/16W	[M]
R903	ERJ3GEYJ102V	1K 1/16W	[M]
R904	ERJ3GEYJ122V	1.2K 1/16W	[M]
R905	ERJ3GEYJ182V	1.8K 1/16W	[M]
R906	ERJ3GEYJ222V	2.2K 1/16W	[M]
R907	ERJ3GEYJ272V	2.7K 1/16W	[M]
R908	ERJ3GEYJ103V	10K 1/16W	[M]
R909	ERJ3GEYJ102V	1K 1/16W	[M]
R910	ERJ3GEYJ102V	1K 1/16W	[M]
R911	ERJ3GEYJ122V	1.2K 1/16W	[M]
R912	ERJ3GEYJ182V	1.8K 1/16W	[M]
R913	ERJ3GEYJ222V	2.2K 1/16W	[M]
R914	ERJ3GEYJ272V	2.7K 1/16W	[M]
R918	ERJ3GEYJ103V	10K 1/16W	[M]
R919	ERJ3GEYJ123V	12K 1/16W	[M]
R920	ERJ3GEYJ223V	22K 1/16W	[M]
R921	ERJ3GEYJ472V	4.7K 1/16W	[M]
R922	ERJ3GEYJ104V	100K 1/16W	[M]
R923	ERJ3GEYJ104V	100K 1/16W	[M]
R924	ERJ3GEYJ104V	100K 1/16W	[M]
R925	ERJ3GEYJ102V	1K 1/16W	[M]
R926	ERJ3GEYJ103V	10K 1/16W	[M]
R927	ERJ3GEYJ102V	1K 1/16W	[M]
R928	ERJ3GEYJ102V	1K 1/16W	[M]
R929	ERJ3GEYJ102V	1K 1/16W	[M]
R930	ERJ3GEYJ102V	1K 1/16W	[M]
R932	ERJ3GEYJ332V	3.3K 1/16W	[M]
R933	ERJ3GEYJ272V	2.7K 1/16W	[M]
R934	ERJ3GEYJ821V	820 1/16W	[M]
R935	ERJ3GEYJ222V	2.2K 1/16W	[M]
R936	ERJ3GEYJ101V	100 1/16W	[M]
R938	ERJ3GEYJ101V	100 1/16W	[M]
R939	ERJ3GEYJ101V	100 1/16W	[M]
R940	ERJ3GEYJ101V	100 1/16W	[M]
R941	ERJ3GEYJ102V	1K 1/16W	[M]
R942	ERJ3GEYJ103V	10K 1/16W	[M]
R943	ERJ3GEYJ102V	1K 1/16W	[M]
R944	ERJ3GEYJ102V	1K 1/16W	[M]
R945	ERJ3GEYJ102V	1K 1/16W	[M]
R946	ERJ3GEYJ223V	22K 1/16W	[M]
R947	ERJ3GEYJ102V	1K 1/16W	[M]
R948	ERJ3GEYJ102V	1K 1/16W	[M]
R949	ERJ3GEYJ102V	1K 1/16W	[M]
R950	ERJ3GEYJ102V	1K 1/16W	[M]
R951	ERJ3GEYJ472V	4.7K 1/16W	[M]
R952	ERJ3GEYJ102V	1K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R953	ERJ3GEYJ102V	1K 1/16W	[M]
R954	ERJ3GEYJ102V	1K 1/16W	[M]
R955	ERJ3GEYJ102V	1K 1/16W	[M]
R956	ERJ3GEYJ102V	1K 1/16W	[M]
R957	ERJ3GEYJ102V	1K 1/16W	[M]
R959	ERJ3GEYJ102V	1K 1/16W	[M]
R960	ERJ3GEYJ103V	10K 1/16W	[M]
R961	ERJ3GEYJ101V	100 1/16W	[M]
R962	ERJ3GEYJ101V	100 1/16W	[M]
R963	ERJ3GEYJ101V	100 1/16W	[M]
R964	ERJ3GEYJ102V	1K 1/16W	[M]
R965	ERJ3GEYJ683V	68K 1/16W	[M]
R966	ERJ3GEYJ334V	330K 1/16W	[M]
R967	ERJ3GEYJ105V	1M 1/16W	[M]
R968	ERJ3GEYJ473V	47K 1/16W	[M]
R969	D0GB823JA002	82K 1/16W	[M]
R970	D0GB823JA002	82K 1/16W	[M]
R971	ERJ3GEYJ222V	2.2K 1/16W	[M]
R972	ERDS2TJ821T	820 1/4W	[M]
R972	ERJ3GEYJ222V	2.2K 1/16W	[M]
R973	ERDS2TJ393T	39K 1/4W	[M]
R973	ERJ3GEYJ560V	56 1/16W	[M]
R974	ERJ3GEYJ560V	56 1/16W	[M]
R975	ERJ3GEYJ820V	82 1/16W	[M]
R976	ERJ3GEYJ680V	68 1/16W	[M]
R977	ERJ3GEYJ680V	68 1/16W	[M]
R1101	ERJ3GEYJ270V	27 1/16W	[M]
R1102	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1103	ERJ3GEYJ183V	18K 1/16W	[M]
R1104	ERJ3GEYJ103V	10K 1/16W	[M]
R1105	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1106	ERJ3GEYJ104V	100K 1/16W	[M]
R1107	ERJ3GEYJ102V	1K 1/16W	[M]
R1109	ERJ3GEYJ102V	1K 1/16W	[M]
R1110	ERJ3GEYJ333V	33K 1/16W	[M]
R1201	ERJ3GEYJ270V	27 1/16W	[M]
R1202	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1203	ERJ3GEYJ183V	18K 1/16W	[M]
R1204	ERJ3GEYJ103V	10K 1/16W	[M]
R1205	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1206	ERJ3GEYJ104V	100K 1/16W	[M]
R1207	ERJ3GEYJ102V	1K 1/16W	[M]
R1209	ERJ3GEYJ102V	1K 1/16W	[M]
R1210	ERJ3GEYJ333V	33K 1/16W	[M]
R1302	ERJ3GEYJ331V	330 1/16W	[M]
R1303	ERJ3GEYJ475V	4.7M 1/16W	[M]
R1304	ERJ3GEYJ223V	22K 1/16W	[M]
R1305	ERJ3GEYJ103V	10K 1/16W	[M]
R1307	ERD25FVJ220T	22 1/4W	[M]
R1308	ERD25FVJ220T	22 1/4W	[M]
R1309	ERDS1FVJ471T	470 1/2W	[M]
R1313	ERJ3GEYJ103V	10K 1/16W	[M]
R1314	ERJ3GEYJ102V	1K 1/16W	[M]
R1316	ERJ3GEYJ102V	1K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1318	ERJ3GEYJ103V	10K 1/16W	[M]
R1327	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1328	ERJ3GEYJ153V	15K 1/16W	[M]
R1329	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1330	ERD2FCVJ4R7T	4.7 1/4W	[M]
R1331	ERJ3GEYJ752V	7.5K 1/16W	[M]
R1332	ERJ3GEYJ103V	10K 1/16W	[M]
R1333	ERD2FCVJ4R7T	4.7 1/4W	[M]
R1334	ERJ3GEYJ223V	22K 1/16W	[M]
R1335	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1336	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1337	ERJ3GEYJ103V	10K 1/16W	[M]
R1338	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1341	ERJ3GEYJ471V	470 1/16W	[M]
R1342	ERJ3GEYJ473V	47K 1/16W	[M]
R1343	ERJ3GEYJ332V	3.3K 1/16W	[M]
R1344	ERJ3GEYJ273V	27K 1/16W	[M]
R1345	ERJ3GEYJ102V	1K 1/16W	[M]
R1371	ERJ3GEYJ223V	22K 1/16W	[M]
R1374	ERJ3GEYJ471V	470 1/16W	[M]
R1401	ERJ3GEYJ123V	12K 1/16W	[M]
R1402	ERJ3GEYJ274V	270K 1/16W	[M]
R1403	ERJ3GEYJ103V	10K 1/16W	[M]
R1404	ERJ3GEYJ223V	22K 1/16W	[M]
R1405	ERJ3GEYJ103V	10K 1/16W	[M]
JA1	ERJ3GEY0R00V	0 1/16W	[M]
JA2	ERJ3GEY0R00V	0 1/16W	[M]
JA3	ERJ3GEY0R00V	0 1/16W	[M]
JA4	ERJ3GEY0R00V	0 1/16W	[M]
JA5	ERJ3GEY0R00V	0 1/16W	[M]
JA6	ERJ3GEY0R00V	0 1/16W	[M]
JB1	ERJ8GEY0R00V	0 1/8W	[M]
JB2	ERJ8GEY0R00V	0 1/8W	[M]
		CAPACITORS	
C1	F1D1C103A004	0.01 16V	[M]
C2	ECA1CAK101XB	100 16V	[M]
C3	F1D1C103A004	0.01 16V	[M]
C4	F1D1H102A012	1000P 50V	[M]
C5	F1D1H102A012	1000P 50V	[M]
C6	F1D1C103A004	0.01 16V	[M]
C7	F1E1H473A001	0.047 50V	[M]
C8	ECBT1H8R2KC5	8.2P 50V	[M]
C9	F1D1H102A012	1000P 50V	[M]
C10	F1D1C103A004	0.01 16V	[M]
C11	ECA1HAK4R7XB	4.7 50V	[M]
C12	F1D1C103A004	0.01 16V	[M]
C13	F1D1H102A012	1000P 50V	[M]
C14	ECA1HAK3R3XB	3.3 50V	[M]
C15	ECA1HAK4R7XB	4.7 50V	[M]
C16	ECFR1C333KR	0.033 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C17	F1C1C183A001	0.018 16V	[M]
C18	F1C1C183A001	0.018 16V	[M]
C19	F0A2A391A010	390P 100V	[M]
C20	ECA1EAK100XB	10 25V	[M]
C21	ECA1HAKR47XB	0.47 50V	[M]
C22	ECA1HAK010XB	1 50V	[M]
C23	ECA1HAK010XB	1 50V	[M]
C24	F1D1H101A012	100P 50V	[M]
C25	ECA1EAK220XB	22 25V	[M]
C26	F1E1H473A001	0.047 50V	[M]
C27	ECA1CAK220XB	22 16V	[M]
C29	ECA0JAK101XB	100 6.3V	[M]
C30	ECA0JAK101XB	100 6.3V	[M]
C31	F1D1H101A012	100P 50V	[M]
C32	F1D1H102A012	1000P 50V	[M]
C33	ECBT1H150JC5	15P 50V	[M]
C34	ECBT1H180JC5	18P 50V	[M]
C36	F1D1H102A012	1000P 50V	[M]
C37	ECFR1C472KR	4700P 16V	[M]
C38	ECBT1C103KS5	0.01 16V	[M]
C39	ECFR1C472KR	4700P 16V	[M]
C41	ECA1HAK010XB	1 50V	[M]
C42	ECA1HAK010XB	1 50V	[M]
C43	F1D1C472A010	4700P 16V	[M]
C44	F1D1C472A010	4700P 16V	[M]
C47	F1D1H102A012	1000P 50V	[M]
C48	F1D1C103A004	0.01 16V	[M]
C49	F1D1H1040002	0.1 50V	[M]
C201	F1D1H221A012	220P 50V	[M]
C202	ECA1HAK2R2XB	2.2 50V	[M]
C203	F1D1H221A012	220P 50V	[M]
C204	ECA1HAK2R2XB	2.2 50V	[M]
C205	F1D1H221A012	220P 50V	[M]
C206	ECA1HAK2R2XB	2.2 50V	[M]
C207	ECA1CAK100XB	10 16V	[M]
C209	F1D1H102A012	1000P 50V	[M]
C210	ECQB1H102JM3	1000P 50V	[M]
C211	ECQV1H224JZ3	0.22 50V	[M]
C212	ECQV1H224JZ3	0.22 50V	[M]
C213	ECA1HAKR47XB	0.47 50V	[M]
C214	ECBT1H182KB5	1800P 50V	[M]
C215	ECQB1H273JF3	0.027 50V	[M]
C251	ECA1HAK100XB	10 50V	[M]
C252	ECBT1H152KB5	1500P 50V	[M]
C253	ECQV1H224JZ3	0.22 50V	[M]
C254	ECQV1H224JZ3	0.22 50V	[M]
C261	ECA1CAK100XB	10 16V	[M]
C262	F1D1H473A012	0.047 50V	[M]
C271	F1D1H473A012	0.047 50V	[M]
C301	ECA1EPX470B	47 25V	[M]
C302	ECA1HAK2R2XB	2.2 50V	[M]
C303	ECA1EPX470B	47 25V	[M]
C304	ECBT1H470JC5	47P 50V	[M]
C305	ECBT1H470JC5	47P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C351	ECA1EPX470B	47 25V	[M]
C352	ECA1CAK470XB	47 16V	[M]
C353	ECA1CAK220XB	22 16V	[M]
C354	F1D1H102A012	1000P 50V	[M]
C355	F1D1H102A012	1000P 50V	[M]
C356	ECBT1H332KB5	3300P 50V	[M]
C361	ECA1CAK470XB	47 16V	[M]
C371	F1D1H1040002	0.1 50V	[M]
C401	F1D1H221A012	220P 50V	[M]
C402	ECA1HAK2R2XB	2.2 50V	[M]
C403	F1D1H221A012	220P 50V	[M]
C404	ECA1HAK2R2XB	2.2 50V	[M]
C405	F1D1H221A012	220P 50V	[M]
C406	ECA1HAK2R2XB	2.2 50V	[M]
C407	ECA1CAK100XB	10 16V	[M]
C409	F1D1H102A012	1000P 50V	[M]
C410	ECQB1H102JM3	1000P 50V	[M]
C411	ECQV1H224JZ3	0.22 50V	[M]
C412	ECQV1H224JZ3	0.22 50V	[M]
C413	ECA1HAKR47XB	0.47 50V	[M]
C414	ECBT1H182KB5	1800P 50V	[M]
C415	ECQB1H273JF3	0.027 50V	[M]
C451	ECA1HAK100XB	10 50V	[M]
C452	ECBT1H152KB5	1500P 50V	[M]
C453	ECQV1H224JZ3	0.22 50V	[M]
C454	ECQV1H224JZ3	0.22 50V	[M]
C461	ECA1CAK100XB	10 16V	[M]
C462	F1D1H473A012	0.047 50V	[M]
C471	F1D1H473A012	0.047 50V	[M]
C500	ECA1VM221B	220 35V	[M]
C501	ECA1EAM682YE	6800 25V	[M]
C502	ECA1EAK100XB	10 25V	[M]
C503	ECBT1H103KB5	0.01 50V	[M]
C504	ECBT1H103KB5	0.01 50V	[M]
C505	ECBT1H103KB5	0.01 50V	[M]
C506	ECA1EM101B	100 25V	[M]
C507	ECBT1H103KB5	0.01 50V	[M]
C508	ECBT1H103KB5	0.01 50V	[M]
C509	ECBT1H103KB5	0.01 50V	[M]
C510	ECA1EAK100XB	10 25V	[M]
C511	ECA1HAK010XB	1 50V	[M]
C512	ECQE2104KF3	0.1 250V	[M]
C514	ECA1EAK100XB	10 25V	[M]
C515	ECBT1H103KB5	0.01 50V	[M]
C600	F1D1H223A012	0.022 50V	[M]
C601	ECKR1H103ZF5	0.01 50V	[M]
C602	ECEA1EKA4R7B	4.7 25V	[M]
C603	ECA1CAM102XB	1000 16V	[M]
C604	ECBT1H103KB5	0.01 50V	[M]
C605	ECA1EM470B	47 25V	[M]
C701	ECEA0JKA330I	33 6.3V	[M]
C702	F1H1C104A065	0.1 16V	[M]
C703	ECEA0JKA101I	100 6.3V	[M]
C704	F1H1C104A065	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C705	F1H1C104A065	0.1 16V	[M]
C706	ECUV1C473KBV	0.047 16V	[M]
C707	ECUV1C393KBV	0.039 16V	[M]
C710	ECUV1H391KBV	390P 50V	[M]
C711	ECJ1VB1H272K	2700P 50V	[M]
C712	ECJ1VB1H272K	2700P 50V	[M]
C713	F1H1C104A065	0.1 16V	[M]
C714	ECEA0JKA101I	100 6.3V	[M]
C715	ECJ1VB1H272K	2700P 50V	[M]
C716	ECUV1H821KBV	820P 50V	[M]
C717	ECUV1E104ZFV	0.1 25V	[M]
C718	ECUV1A224KBV	0.22 10V	[M]
C721	ECJ1VC1H150J	15P 50V	[M]
C722	ECJ1VC1H150J	15P 50V	[M]
C723	ECEA1AKA221I	220 10V	[M]
C724	F1H1C104A065	0.1 16V	[M]
C725	ECJ1VB1H102K	1000P 50V	[M]
C726	ECJ1VB1H102K	1000P 50V	[M]
C727	ECA1HAK010XI	1 50V	[M]
C728	ECA1HAK010XI	1 50V	[M]
C730	ECUV1E104ZFV	0.1 25V	[M]
C731	ECA0JAK221XI	220 6.3V	[M]
C732	ECEA0JKA221I	220 6.3V	[M]
C733	F1H1C104A065	0.1 16V	[M]
C734	ECEA1AKA221I	220 10V	[M]
C735	ECUV1E104ZFV	0.1 25V	[M]
C738	ECUV1C563KBV	0.056 16V	[M]
C739	ECUV1H222KBV	2200P 50V	[M]
C742	ECUV1C473KBV	0.047 16V	[M]
C743	ECUV1E104ZFV	0.1 25V	[M]
C744	ECUV1H562KBV	5600P 50V	[M]
C745	ECUV1E104ZFV	0.1 25V	[M]
C747	ECUV1H471KBV	470P 50V	[M]
C749	ECJ1VB1H222K	2200P 50V	[M]
C752	ECUV1H152KBV	1500P 50V	[M]
C753	ECUV1H471KBV	470P 50V	[M]
C754	ECUV1H471KBV	470P 50V	[M]
C804	ECBT1H470JC5	47P 50V	[M]
C805	ECBT1H470JC5	47P 50V	[M]
C806	ECBT1H103KB5	0.01 50V	[M]
C807	F1D1H102A012	1000P 50V	[M]
C808	ECA0JAK470XB	47 6.3V	[M]
C809	F1D1H561A012	560P 50V	[M]
C810	ECEA1CKA100B	10 16V	[M]
C811	F1D1H331A012	330P 50V	[M]
C812	ECEA1CKA100B	10 16V	[M]
C813	F1D1H101A012	100P 50V	[M]
C814	F1D1H101A012	100P 50V	[M]
C815	ECA1HAK010XB	1 50V	[M]
C816	ECA1CAK220XB	22 16V	[M]
C817	F1D1H101A012	100P 50V	[M]
C818	F1D1H101A012	100P 50V	[M]
C819	F1D1H101A012	100P 50V	[M]
C820	F1D1H221A012	220P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C821	F1D1H221A012	220P 50V	[M]
C822	F1D1H101A012	100P 50V	[M]
C823	F1D1H101A012	100P 50V	[M]
C824	F1D1H101A012	100P 50V	[M]
C828	F1D1H102A012	1000P 50V	[M]
C830	F1D1H102A012	1000P 50V	[M]
C831	F1D1H102A012	1000P 50V	[M]
C832	ECBT1H103KB5	0.01 50V	[M]
C834	ECA1CAK101XB	100 16V	[M]
C900	ECUV1H101JCV	100P 50V	[M]
C901	ECUV1H101JCV	100P 50V	[M]
C902	ECJ1VC1H221J	220P 50V	[M]
C903	ECEA0JKA470B	47 6.3V	[M]
C904	ECUV1E103KBV	0.01 25V	[M]
C905	ECEA0JKA101B	100 6.3V	[M]
C906	ECA0JAM102XB	1000 6.3V	[M]
C907	ECEA0JKA101B	100 6.3V	[M]
C908	ECA0JAM102XB	1000 6.3V	[M]
C909	ECJ1VB1H472K	4700P 50V	[M]
C910	ECJ1VB1H472K	4700P 50V	[M]
C911	ECJ1VB1H472K	4700P 50V	[M]
C912	ECJ1VB1H472K	4700P 50V	[M]
C913	ECJ1VB1H472K	4700P 50V	[M]
C914	ECJ1VB1H472K	4700P 50V	[M]
C915	ECJ1VB1H472K	4700P 50V	[M]
C916	ECJ1VB1H472K	4700P 50V	[M]
C917	F1H1C104A065	0.1 16V	[M]
C919	ECUV1H101JCV	100P 50V	[M]
C920	ECUV1H220JCV	22P 50V	[M]
C921	ECUV1H180JCV	18P 50V	[M]
C922	ECUV1E103KBV	0.01 25V	[M]
C923	ECUV1E103KBV	0.01 25V	[M]
C924	ECEA1HKA010B	1 50V	[M]
C925	ECUV1E103KBV	0.01 25V	[M]
C926	ECUV1H820JCV	82P 50V	[M]
C927	ECUV1H820JCV	82P 50V	[M]
C928	ECEA1HKA010B	1 50V	[M]
C929	ECUV1H180JCV	18P 50V	[M]
C931	ECJ1VB1H102K	1000P 50V	[M]
C932	ECJ1VB1H102K	1000P 50V	[M]
C933	ECJ1VC1H470J	47P 50V	[M]
C934	ECJ1VC1H470J	47P 50V	[M]
C1101	ECA1HAK010XB	1 50V	[M]
C1102	ECUV1H471KBV	470P 50V	[M]
C1103	ECA1CAK101XB	100 16V	[M]
C1104	ECUV1C273KBV	0.027 16V	[M]
C1105	ECUV1H471KBV	470P 50V	[M]
C1106	ECA1HAK2R2XB	2.2 50V	[M]
C1107	F1H1H152A219	1500P 50V	[M]
C1108	ECA1CAK100XB	10 16V	[M]
C1109	ECA1HAK3R3XB	3.3 50V	[M]
C1110	ECUV1H682KBV	6800P 50V	[M]
C1121	ECJ1VB1H102K	1000P 50V	[M]
C1122	ECUV1E103KBV	0.01 25V	[M]

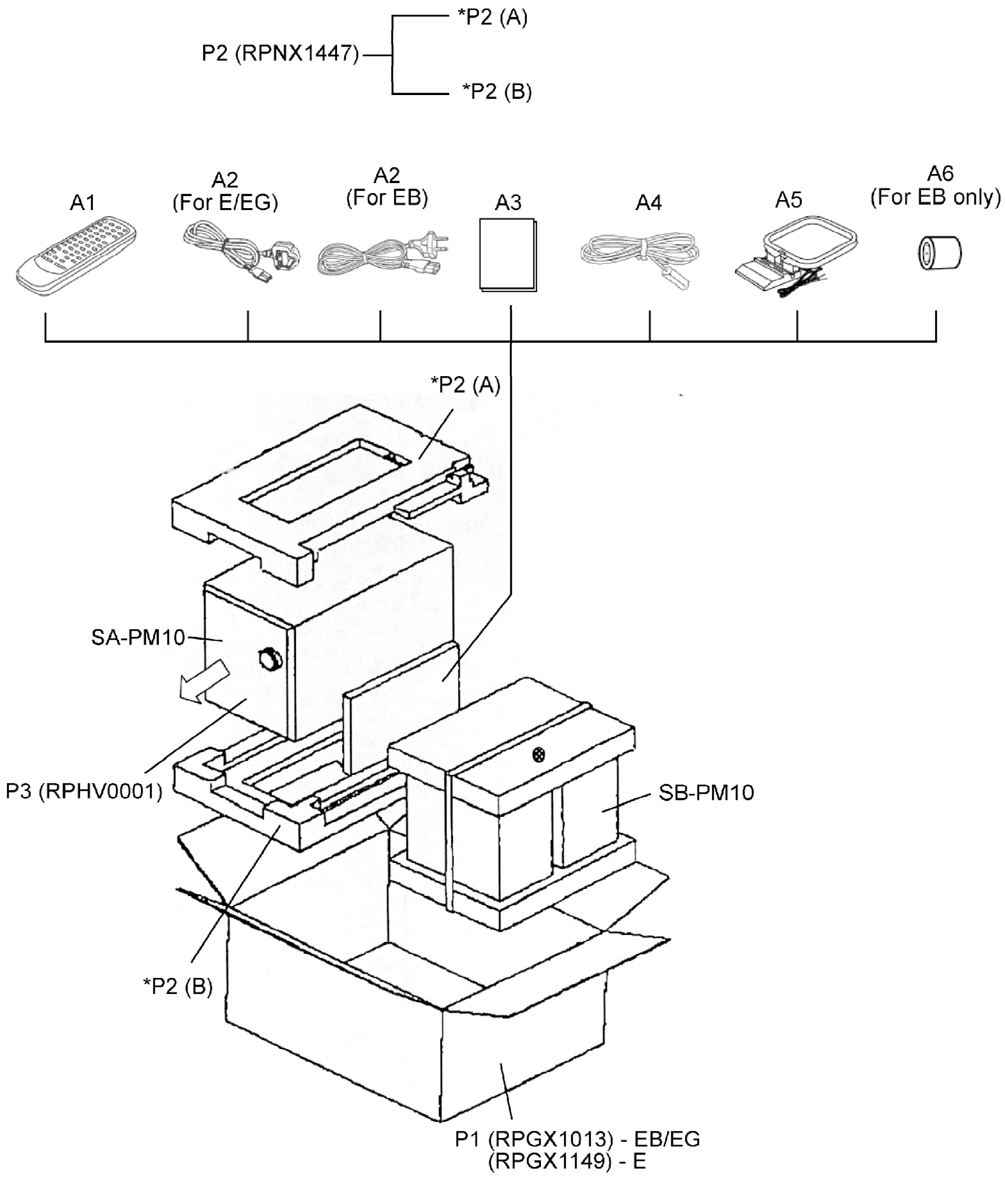
Ref. No.	Part No.	Part Name & Description	Remarks
C1123	**ECUV1H271KBV**	**270P 50V**	**[M]**
C1201	**ECA1HAK010XB**	**1 50V**	**[M]**
C1202	**ECUV1H471KBV**	**470P 50V**	**[M]**
C1203	**ECA1CAK101XB**	**100 16V**	**[M]**
C1204	**ECUV1C273KBV**	**0.027 16V**	**[M]**
C1205	**ECUV1H471KBV**	**470P 50V**	**[M]**
C1206	**ECA1HAK2R2XB**	**2.2 50V**	**[M]**
C1207	**F1H1H152A219**	**1500P 50V**	**[M]**
C1208	**ECA1CAK100XB**	**10 16V**	**[M]**
C1209	**ECA1HAK3R3XB**	**3.3 50V**	**[M]**
C1210	**ECUV1H682KBV**	**6800P 50V**	**[M]**
C1221	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C1222	**ECUV1E103KBV**	**0.01 25V**	**[M]**
C1223	**ECUV1H271KBV**	**270P 50V**	**[M]**
C1301	**ECA1HAK010XB**	**1 50V**	**[M]**
C1302	**ECUV1C333KBV**	**0.033 16V**	**[M]**
C1303	**ECUV1C333KBV**	**0.033 16V**	**[M]**
C1304	**ECEA1HKA4R7B**	**4.7 50V**	**[M]**
C1305	**ECA1CAK330XB**	**33 16V**	**[M]**
C1307	**ECA1AAK221XQ**	**220 10V**	**[M]**
C1308	**ECA1CAK220XB**	**22 16V**	**[M]**
C1310	**ECA1HAK0R1XB**	**0.1 50V**	**[M]**
C1311	**ECA1CAK470XB**	**47 16V**	**[M]**
C1312	**ECUV1H332KBV**	**3300P 50V**	**[M]**
C1314	**ECUV1H222KBV**	**2200P 50V**	**[M]**
C1315	**ECUV1H222KBV**	**2200P 50V**	**[M]**
C1316	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C1317	**ECJ1VB1H102K**	**1000P 50V**	**[M]**
C1318	**ECQV1H473JZ3**	**0.047 50V**	**[M]**
C1319	**ECA1CAK101XB**	**100 16V**	**[M]**
C1320	**ECA1HAK010XB**	**1 50V**	**[M]**
C1321	**ECQP1472JZT**	**4700P 100V**	**[M]**
C1322	**F0A2A102A010**	**1000P 100V**	**[M]**
C1323	**ECEA1HKN010B**	**1 50V**	**[M]**
C1324	**ECA1CAK470XB**	**47 16V**	**[M]**
C1325	**ECUV1E103KBV**	**0.01 25V**	**[M]**
C1326	**ECA1CAK100XB**	**10 16V**	**[M]**
C1371	**ECUV1E103KBV**	**0.01 25V**	**[M]**
		CHIP JUMPER	
RJ701	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ702	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ703	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ704	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ707	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ708	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ709	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ711	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ712	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ713	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ714	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ715	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**
RJ716	**ERJ3GEY0R00V**	**0 1/16W**	**[M]**

Ref. No.	Part No.	Part Name & Description	Remarks
RJ717	ERJ3GEY0R00V	0 1/16W	[M]
RJ718	ERJ3GEY0R00V	0 1/16W	[M]
RJ719	ERJ3GEY0R00V	0 1/16W	[M]
RJ720	ERJ3GEY0R00V	0 1/16W	[M]
RJ721	ERJ3GEY0R00V	0 1/16W	[M]
RJ722	ERJ3GEY0R00V	0 1/16W	[M]
RJ723	ERJ3GEY0R00V	0 1/16W	[M]
RJ724	ERJ3GEY0R00V	0 1/16W	[M]
RJ725	ERJ3GEY0R00V	0 1/16W	[M]
RJ726	ERJ3GEY0R00V	0 1/16W	[M]
RJ727	ERJ3GEY0R00V	0 1/16W	[M]
RJ728	ERJ3GEY0R00V	0 1/16W	[M]
RJ729	ERJ3GEY0R00V	0 1/16W	[M]
RJ731	ERJ3GEY0R00V	0 1/16W	[M]
RJ732	ERJ3GEY0R00V	0 1/16W	[M]
RJ733	ERJ3GEY0R00V	0 1/16W	[M]
RJ734	ERJ3GEY0R00V	0 1/16W	[M]
RJ735	ERJ3GEY0R00V	0 1/16W	[M]
RJ736	ERJ3GEY0R00V	0 1/16W	[M]
RJ737	ERJ3GEY0R00V	0 1/16W	[M]
RJ738	ERJ3GEY0R00V	0 1/16W	[M]

20.5. Packaging Materials & Accessories Parts List

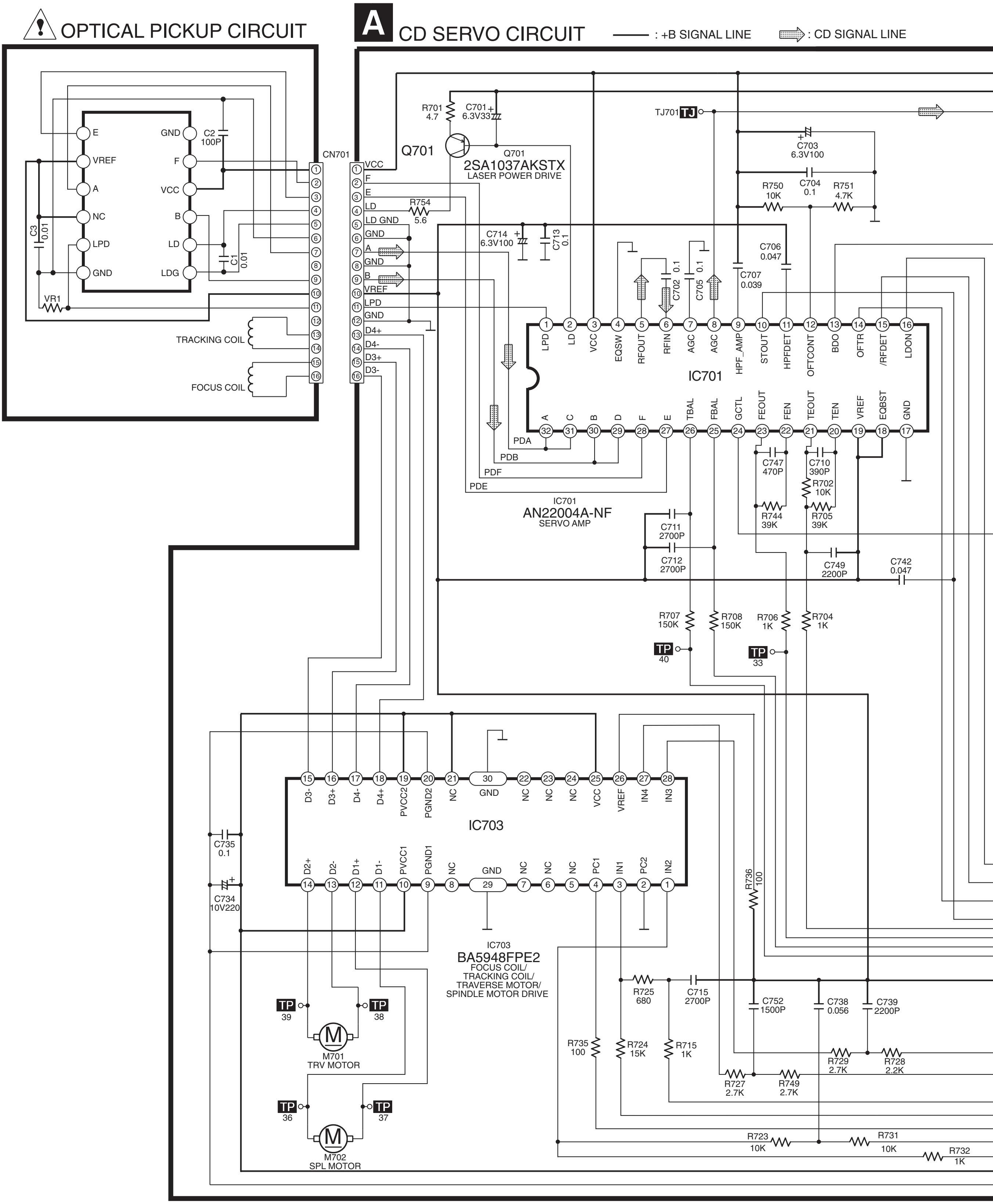
Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGX1013	PACKING CASE	[M]EB EG
P1	RPGX1149	PACKING CASE	[M]E
P2	RPN1447	POLYFOAM	[M]
P3	RPHV0001	MIRAMAT SHEET	[M]
		ACCESSORIES	
A1	EUR7711010	REMOTE CONTROL	[M]
A1-1	UR64EC2337J	R/C BATTERY COVER	[M]
A2	RJA0019-2K	AC CORD (SF)	[M]EG E ⚠
A2	VJA0733	AC CORD (SF)	[M]EB ⚠
A3	RQT6679-H	O/I BOOK (Du/Da/Sw)	[M]EG
A3	RQT6680-D	O/I BOOK (Ge/It/Fr)	[M]EG
A3	RQT6681-E	O/I BOOK (Sp/Ru/Cz/Po)	[M]E
A3	RQT6682-B	O/I BOOK (En)	[M]EB E
A4	RSA0007-L	FM ANTENNA WIRE	[M]
A5	RSA0033-1	AM LOOP ANTENNA	[M]
A6	K1YZ02000013	ANT ADAPTER	[M]EB

20.6. Packaging


*P2 (A)
P2 (RPNX1447)
*P2 (B)
A1
A2
(For E/EG)
A2
(For EB)
A3
A4
A5
A6
(For EB only)
*P2 (A)
SA-PM10
P3 (RPHV0001)
SB-PM10
*P2 (B)
P1 (RPGX1013) - EB/EG
(RPGX1149) - E

PRT0303 D/A/J/N/S/E

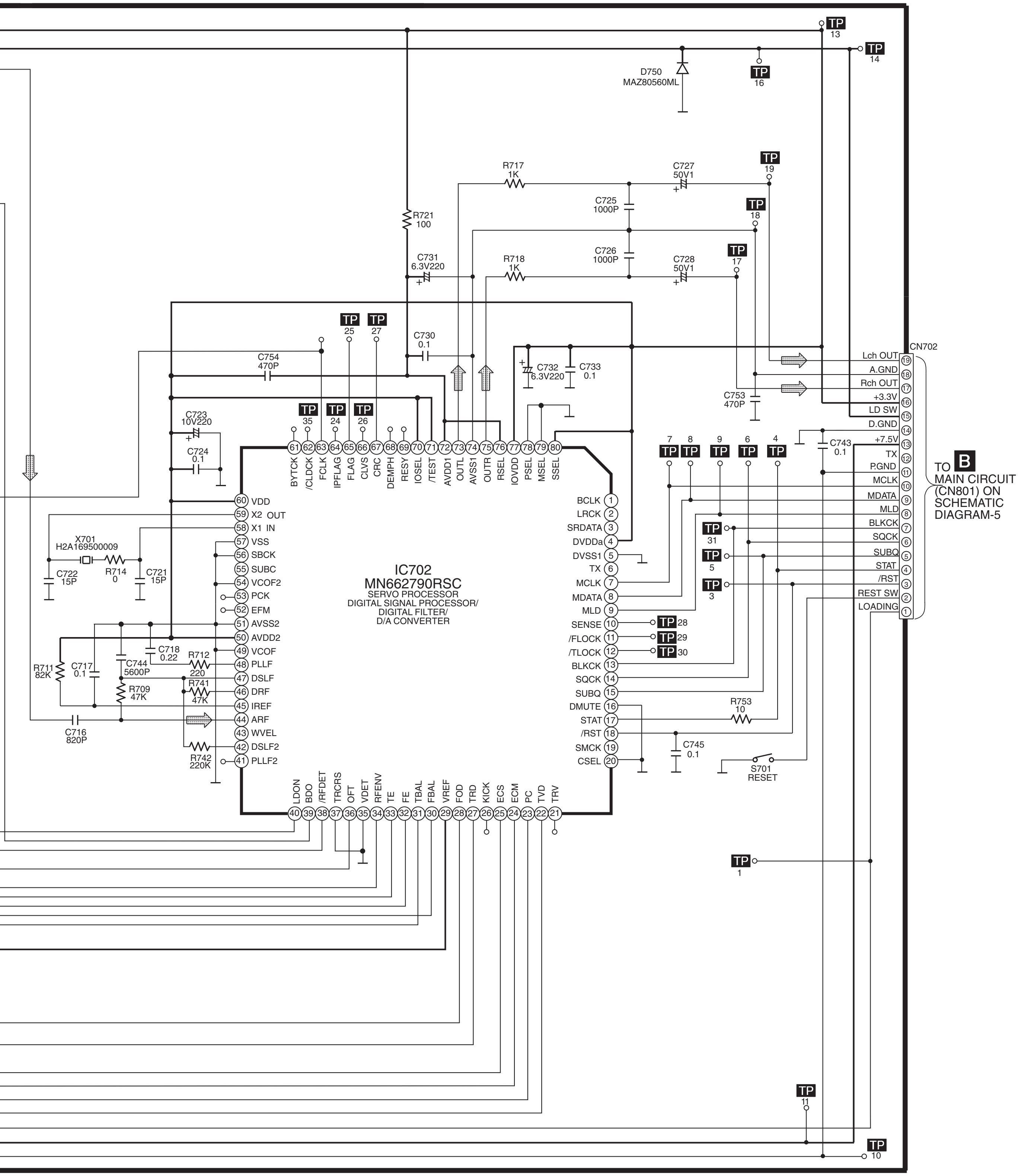
SCHEMATIC DIAGRAM -1


OPTICAL PICKUP CIRCUIT
A
CD SERVO CIRCUIT
: +B SIGNAL LINE
: CD SIGNAL LINE
E
VREF
A
NC
LPD
GND
GND
F
VCC
B
LD
LDG
C2 100P
C3 0.01
C1 0.01
VR1
TRACKING COIL
FOCUS COIL
CN701
VCC
F
E
LD
LD GND
GND
A
GND
B
VREF
LPD
GND
D4+
D4-
D3+
D3-
R701 4.7
C701 6.3V33
Q701
Q701 2SA1037AKSTX LASER POWER DRIVE
R754 5.6
C714 6.3V100
C713 0.1
TJ701 TJ
C703 6.3V100
C704 0.1
R750 10K
R751 4.7K
C706 0.047
C707 0.039
C702 0.1
C705 0.1
LPD
LD
VCC
EQSW
RFOUT
RFIN
AGC
AGC
HPF_AMP
STOUT
HPFDET
OFTCONT
BDO
OFTR
/RFDET
LDON
IC701
A
C
B
D
F
E
TBAL
FBAL
GCTL
FEOUT
FEN
TEOUT
TEN
VREF
EQBST
GND
PDA
PDB
PDF
PDE
C747 470P
C710 390P
R702 10K
R744 39K
R705 39K
IC701 AN22004A-NF SERVO AMP
C711 2700P
C712 2700P
C749 2200P
C742 0.047
R707 150K
R708 150K
R706 1K
R704 1K
TP 40
TP 33
D3-
D3+
D4-
D4+
PVCC2
PGND2
NC
GND
NC
NC
NC
VCC
VREF
IN4
IN3
IC703
D2+
D2-
D1+
D1-
PVCC1
PGND1
NC
GND
NC
NC
NC
PC1
IN1
PC2
IN2
C735 0.1
C734 10V220
IC703 BA5948FPE2 FOCUS COIL/ TRACKING COIL/ TRAVERSE MOTOR/ SPINDLE MOTOR DRIVE
R736 100
R725 680
C715 2700P
C752 1500P
C738 0.056
C739 2200P
R735 100
R724 15K
R715 1K
R729 2.7K
R728 2.2K
R727 2.7K
R749 2.7K
R723 10K
R731 10K
R732 1K
TP 39
TP 38
M701 TRV MOTOR
TP 36
TP 37
M702 SPL MOTOR

SCHEMATIC DIAGRAM - 2

A CD SERVO CIRCUIT

: +B SIGNAL LINE　　: CD SIGNAL LINE

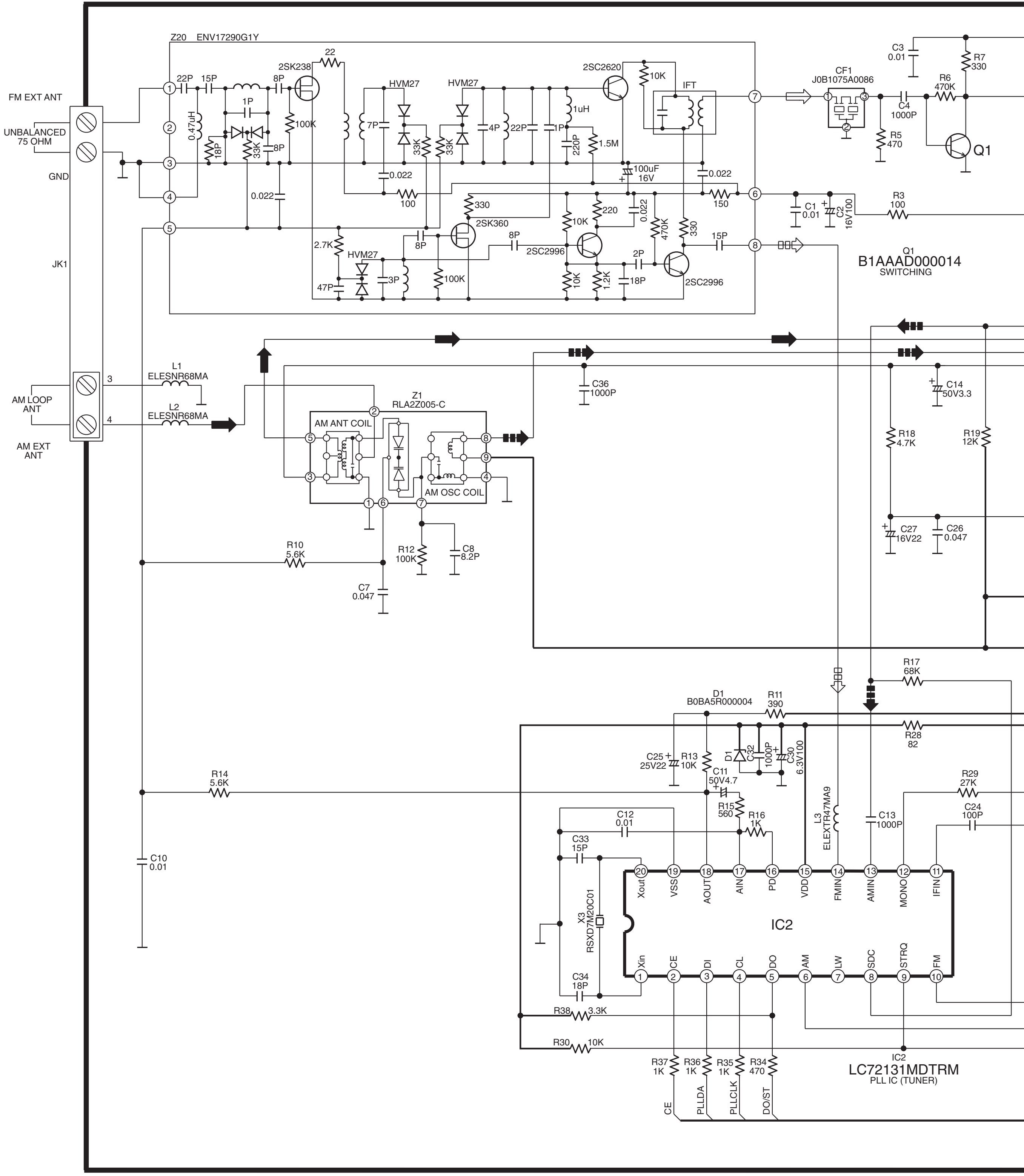


TP 13
TP 14
D750
MAZ80560ML
TP 16
R717 1K
C727 50V1
TP 19
C725 1000P
TP 18
R721 100
C731 6.3V220
R718 1K
C726 1000P
C728 50V1
TP 17
TP 25
TP 27
C730 0.1
C754 470P
C732 6.3V220
C733 0.1
CN702
Lch OUT 19
A.GND 18
Rch OUT 17
+3.3V 16
LD SW 15
D.GND 14
+7.5V 13
TX 12
P.GND 11
MCLK 10
MDATA 9
MLD 8
BLKCK 7
SQCK 6
SUBQ 5
STAT 4
/RST 3
REST SW 2
LOADING 1
C753 470P
C743 0.1
TO B MAIN CIRCUIT (CN801) ON SCHEMATIC DIAGRAM-5
TP 35
TP 24
TP 26
C723 10V220
C724 0.1
TP 7
TP 8
TP 9
TP 6
TP 4
61 BYTCK
62 /CLDCK
63 FCLK
64 IPFLAG
65 FLAG
66 CLVS
67 CRC
68 DEMPH
69 RESY
70 IOSEL
71 /TEST
72 AVDD1
73 OUTL
74 AVSS1
75 OUTR
76 RSEL
77 IOVDD
78 PSEL
79 MSEL
80 SSEL
60 VDD
59 X2 OUT
58 X1 IN
57 VSS
56 SBCK
55 SUBC
54 VCOF2
53 PCK
52 EFM
51 AVSS2
50 AVDD2
49 VCOF
48 PLLF
47 DSLF
46 DRF
45 IREF
44 ARF
43 WVEL
42 DSLF2
41 PLLF2
BCLK 1
LRCK 2
SRDATA 3
DVDDa 4
DVSS1 5
TX 6
MCLK 7
MDATA 8
MLD 9
SENSE 10
/FLOCK 11
/TLOCK 12
BLKCK 13
SQCK 14
SUBQ 15
DMUTE 16
STAT 17
/RST 18
SMCK 19
CSEL 20
IC702
MN662790RSC
SERVO PROCESSOR
DIGITAL SIGNAL PROCESSOR/
DIGITAL FILTER/
D/A CONVERTER
X701
H2A169500009
C722 15P
R714 0
C721 15P
TP 31
TP 5
TP 3
TP 28
TP 29
TP 30
C718 0.22
R712 220
R711 82K
C717 0.1
C744 5600P
R741 47K
R709 47K
C716 820P
R742 220K
R753 10
C745 0.1
S701 RESET
40 LDON
39 BDO
38 /RFDET
37 TRCRS
36 OFT
35 VDET
34 RFENV
33 TE
32 FE
31 TBAL
30 FBAL
29 VREF
28 FOD
27 TRD
26 KICK
25 ECS
24 ECM
23 PC
22 TVD
21 TRV
TP 1
TP 11
TP 10

SCHEMATIC DIAGRAM-3

B MAIN (TUNER) CIRCUIT

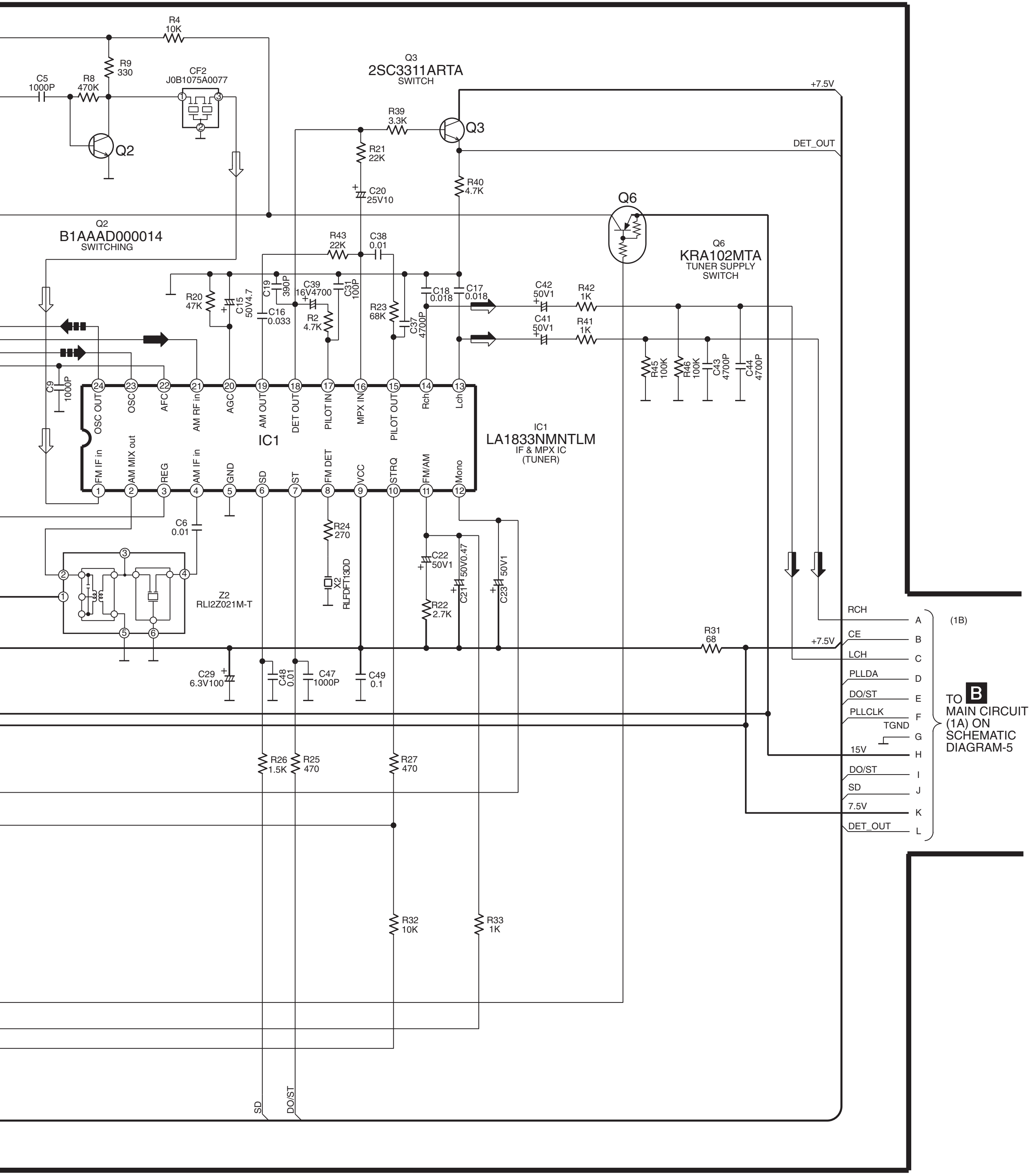
——— : +B SIGNAL LINE
➡ : AM SIGNAL LINE
▯▯▯⇨ : FM OSC SIGNAL LINE
⇨ : FM SIGNAL LINE
▮▮▮➡ : AM OSC SIGNAL LINE


Z20 ENV17290G1Y
FM EXT ANT
UNBALANCED 75 OHM
GND
JK1
22P
15P
8P
2SK238
22
1P
0.47uH
18P
33K
8P
100K
HVM27
7P
33K
0.022
100
4P
22P
1P
1uH
220P
1.5M
2SC2620
10K
IFT
100uF 16V
0.022
150
330
2SK360
8P
2.7K
47P
3P
100K
2SC2996
10K
220
0.022
470K
330
15P
2P
1.2K
18P
CF1 J0B1075A0086
C3 0.01
R7 330
R6 470K
C4 1000P
R5 470
Q1
C1 0.01
C2 16V100
R3 100
Q1 B1AAAD000014 SWITCHING
AM LOOP ANT
AM EXT ANT
L1 ELESNR68MA
L2 ELESNR68MA
Z1 RLA2Z005-C
AM ANT COIL
AM OSC COIL
C36 1000P
C14 50V3.3
R18 4.7K
R19 12K
C27 16V22
C26 0.047
R10 5.6K
R12 100K
C8 8.2P
C7 0.047
R17 68K
D1 B0BA5R000004
R11 390
R28 82
C25 25V22
R13 10K
D1
C32 1000P
C30 6.3V100
C11 50V4.7
R14 5.6K
R15 560
R16 1K
L3 ELEXTR47MA9
C13 1000P
R29 27K
C24 100P
C12 0.01
C33 15P
C10 0.01
X3 RSXD7M20C01
C34 18P
IC2
Xout VSS AOUT AIN PD VDD FMIN AMIN MONO IFIN
Xin CE DI CL DO AM LW SDC STRQ FM
R38 3.3K
R30 10K
R37 1K
R36 1K
R35 1K
R34 470
CE
PLLDA
PLLCLK
DO/ST
IC2 LC72131MDTRM PLL IC (TUNER)

SCHEMATIC DIAGRAM-4

B MAIN (TUNER) CIRCUIT

—— : +B SIGNAL LINE
➡ : AM SIGNAL LINE
⇨ : FM SIGNAL LINE
▮▮➡ : AM OSC SIGNAL LINE
⇨ : FM/AM SIGNAL LINE


R4
10K
R9
330
C5
1000P
R8
470K
CF2
J0B1075A0077
Q2
Q2
B1AAAD000014
SWITCHING
Q3
2SC3311ARTA
SWITCH
R39
3.3K
Q3
R21
22K
C20
25V10
R40
4.7K
+7.5V
DET_OUT
Q6
Q6
KRA102MTA
TUNER SUPPLY
SWITCH
R43
22K
C38
0.01
R20
47K
C15
50V4.7
C19
390P
C39
16V4700
C31
100P
C16
0.033
R2
4.7K
R23
68K
C37
4700P
C18
0.018
C17
0.018
C42
50V1
R42
1K
C41
50V1
R41
1K
R45
100K
R46
100K
C43
4700P
C44
4700P
C9
1000P
OSC OUT
OSC
AFC
AM RF in
AGC
AM OUT
DET OUT
PILOT IN
MPX IN
PILOT OUT
Rch
Lch
IC1
IC1
LA1833NMNTLM
IF & MPX IC
(TUNER)
FM IF in
AM MIX out
REG
AM IF in
GND
SD
ST
FM DET
VCC
STRQ
FM/AM
Mono
C6
0.01
R24
270
X2
RLFDFT13DD
C22
50V1
C21
50V0.47
C23
50V1
R22
2.7K
Z2
RLI2Z021M-T
C29
6.3V100
C48
0.01
C47
1000P
C49
0.1
R31
68
+7.5V
R26
1.5K
R25
470
R27
470
R32
10K
R33
1K
SD
DO/ST
RCH
CE
LCH
PLLDA
DO/ST
PLLCLK
TGND
15V
DO/ST
SD
7.5V
DET_OUT
A
B
C
D
E
F
G
H
I
J
K
L
(1B)
TO B
MAIN CIRCUIT
(1A) ON
SCHEMATIC
DIAGRAM-5

SCHEMATIC DIAGRAM-5

B MAIN CIRCUIT

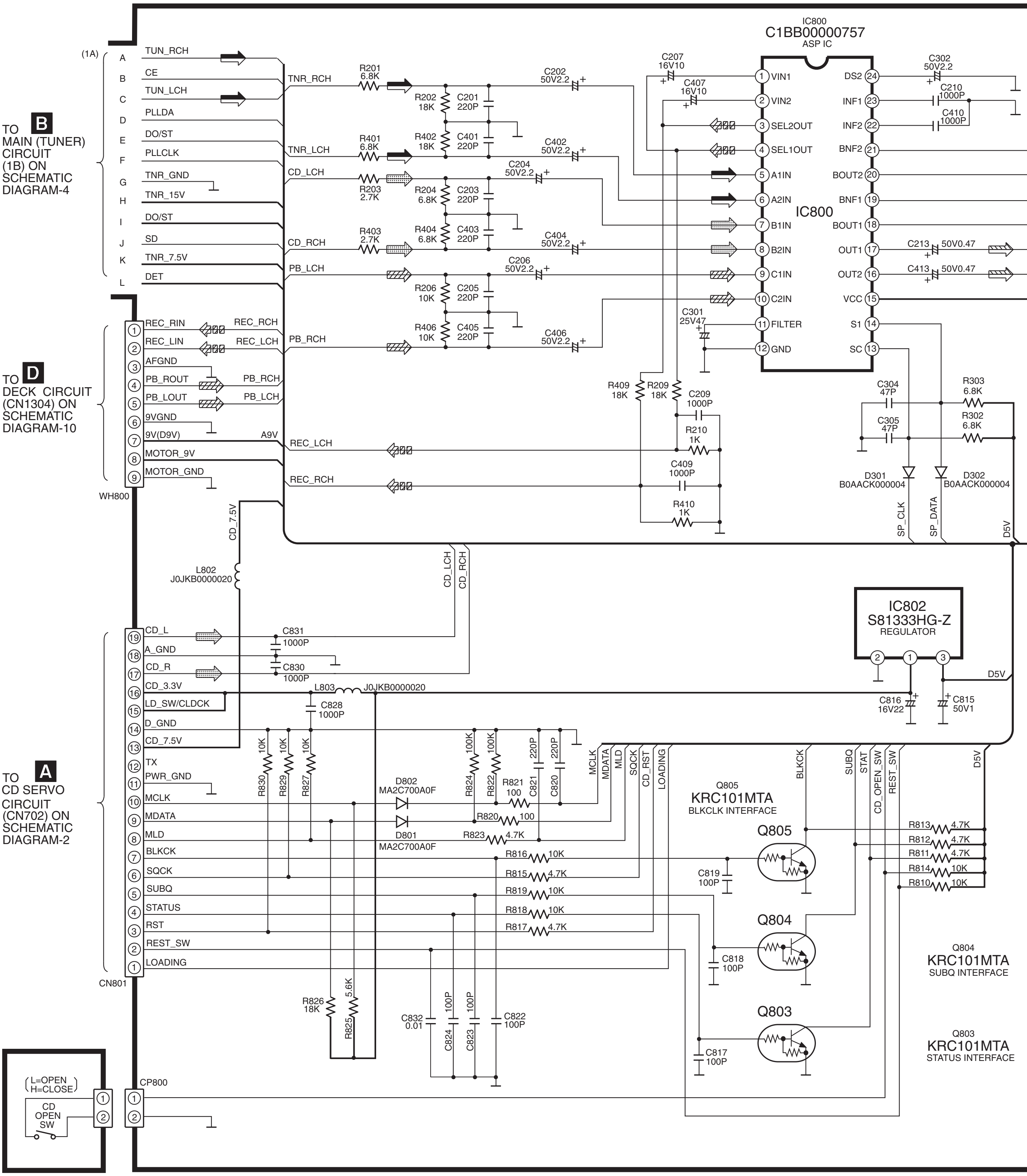
—— : +B SIGNAL LINE

: RECORD SIGNAL LINE

: PLAYBACK SIGNAL LINE

: CD SIGNAL LINE

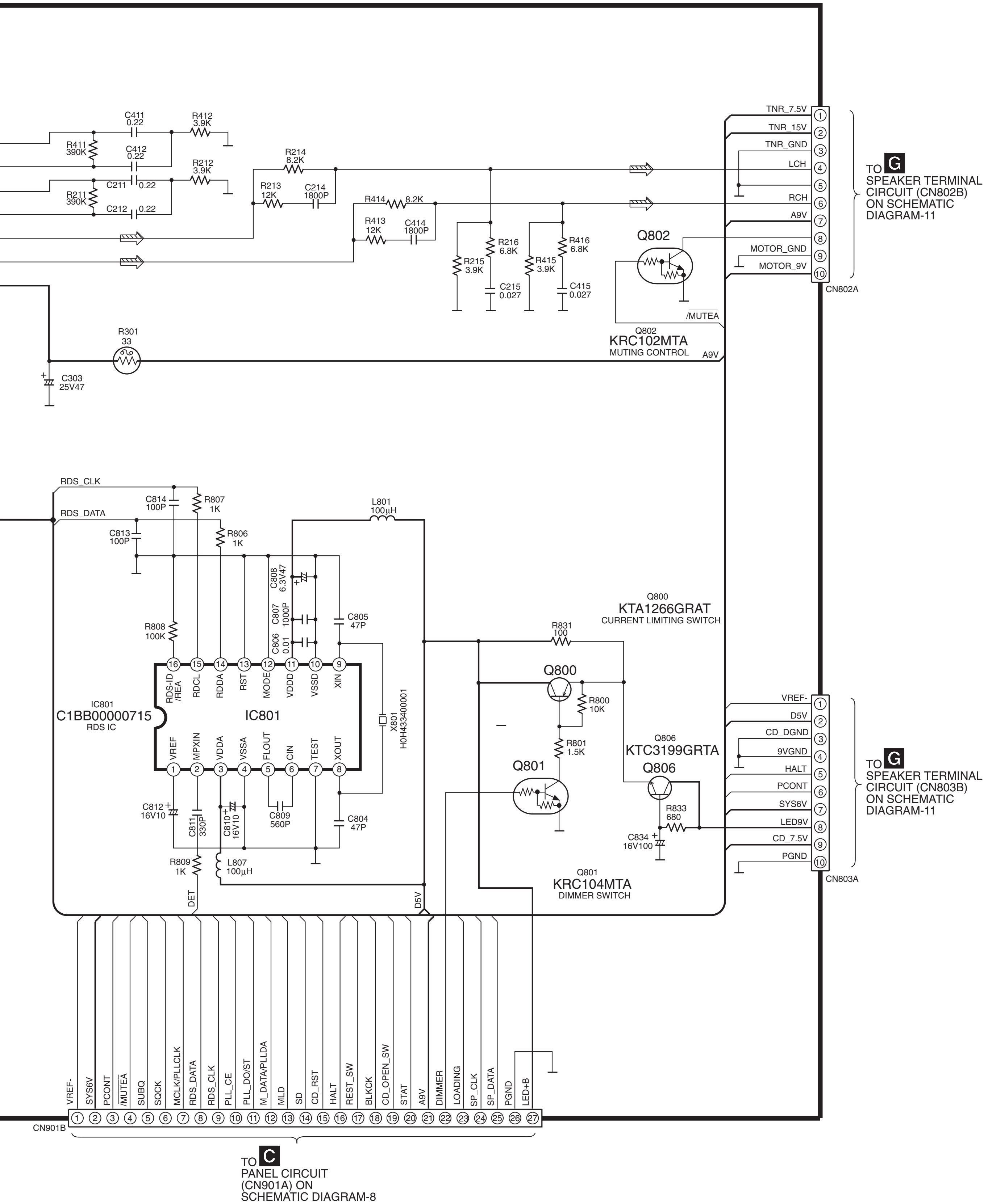
: FM/AM SIGNAL LINE


TO B MAIN (TUNER) CIRCUIT (1B) ON SCHEMATIC DIAGRAM-4
(1A)
A TUN_RCH
B CE
C TUN_LCH
D PLLDA
E DO/ST
F PLLCLK
G TNR_GND
H TNR_15V
I DO/ST
J SD
K TNR_7.5V
L DET
TNR_RCH
TNR_LCH
CD_LCH
CD_RCH
PB_LCH
PB_RCH
R201 6.8K
R202 18K
C201 220P
C202 50V2.2
R401 6.8K
R402 18K
C401 220P
C402 50V2.2
R203 2.7K
R204 6.8K
C203 220P
C204 50V2.2
R403 2.7K
R404 6.8K
C403 220P
C404 50V2.2
R206 10K
C205 220P
C206 50V2.2
R406 10K
C405 220P
C406 50V2.2
IC800
C1BB00000757
ASP IC
C207 16V10
C407 16V10
1 VIN1
2 VIN2
3 SEL2OUT
4 SEL1OUT
5 A1IN
6 A2IN
7 B1IN
8 B2IN
9 C1IN
10 C2IN
11 FILTER
12 GND
DS2 24
INF1 23
INF2 22
BNF2 21
BOUT2 20
BNF1 19
BOUT1 18
OUT1 17
OUT2 16
VCC 15
S1 14
SC 13
C302 50V2.2
C210 1000P
C410 1000P
C213 50V0.47
C413 50V0.47
C301 25V47
R409 18K
R209 18K
C209 1000P
R210 1K
C409 1000P
R410 1K
C304 47P
C305 47P
R303 6.8K
R302 6.8K
D301 B0AACK000004
D302 B0AACK000004
SP_CLK
SP_DATA
D5V
TO D DECK CIRCUIT (CN1304) ON SCHEMATIC DIAGRAM-10
1 REC_RIN
2 REC_LIN
3 AFGND
4 PB_ROUT
5 PB_LOUT
6 9VGND
7 9V(D9V)
8 MOTOR_9V
9 MOTOR_GND
WH800
REC_RCH
REC_LCH
PB_RCH
PB_LCH
A9V
REC_LCH
REC_RCH
CD_7.5V
L802 J0JKB0000020
CD_LCH
CD_RCH
IC802
S81333HG-Z
REGULATOR
C816 16V22
C815 50V1
D5V
TO A CD SERVO CIRCUIT (CN702) ON SCHEMATIC DIAGRAM-2
19 CD_L
18 A_GND
17 CD_R
16 CD_3.3V
15 LD_SW/CLDCK
14 D_GND
13 CD_7.5V
12 TX
11 PWR_GND
10 MCLK
9 MDATA
8 MLD
7 BLKCK
6 SQCK
5 SUBQ
4 STATUS
3 RST
2 REST_SW
1 LOADING
CN801
C831 1000P
C830 1000P
L803 J0JKB0000020
C828 1000P
R830 10K
R829 10K
R827 10K
D802 MA2C700A0F
D801 MA2C700A0F
R824 100K
R822 100K
R821 100
R820 100
R823 4.7K
C821 220P
C820 220P
R816 10K
R815 4.7K
R819 10K
R818 10K
R817 4.7K
MCLK
MDATA
MLD
SQCK
CD_RST
LOADING
BLKCK
SUBQ
STAT
CD_OPEN_SW
REST_SW
D5V
Q805 KRC101MTA BLKCLK INTERFACE
Q805
Q804
Q803
R813 4.7K
R812 4.7K
R811 4.7K
R814 10K
R810 10K
C819 100P
C818 100P
C817 100P
Q804 KRC101MTA SUBQ INTERFACE
Q803 KRC101MTA STATUS INTERFACE
R826 18K
R825 5.6K
C832 0.01
C824 100P
C823 100P
C822 100P
L=OPEN H=CLOSE
CD OPEN SW
CP800

SCHEMATIC DIAGRAM-6

B MAIN CIRCUIT

—— : +B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

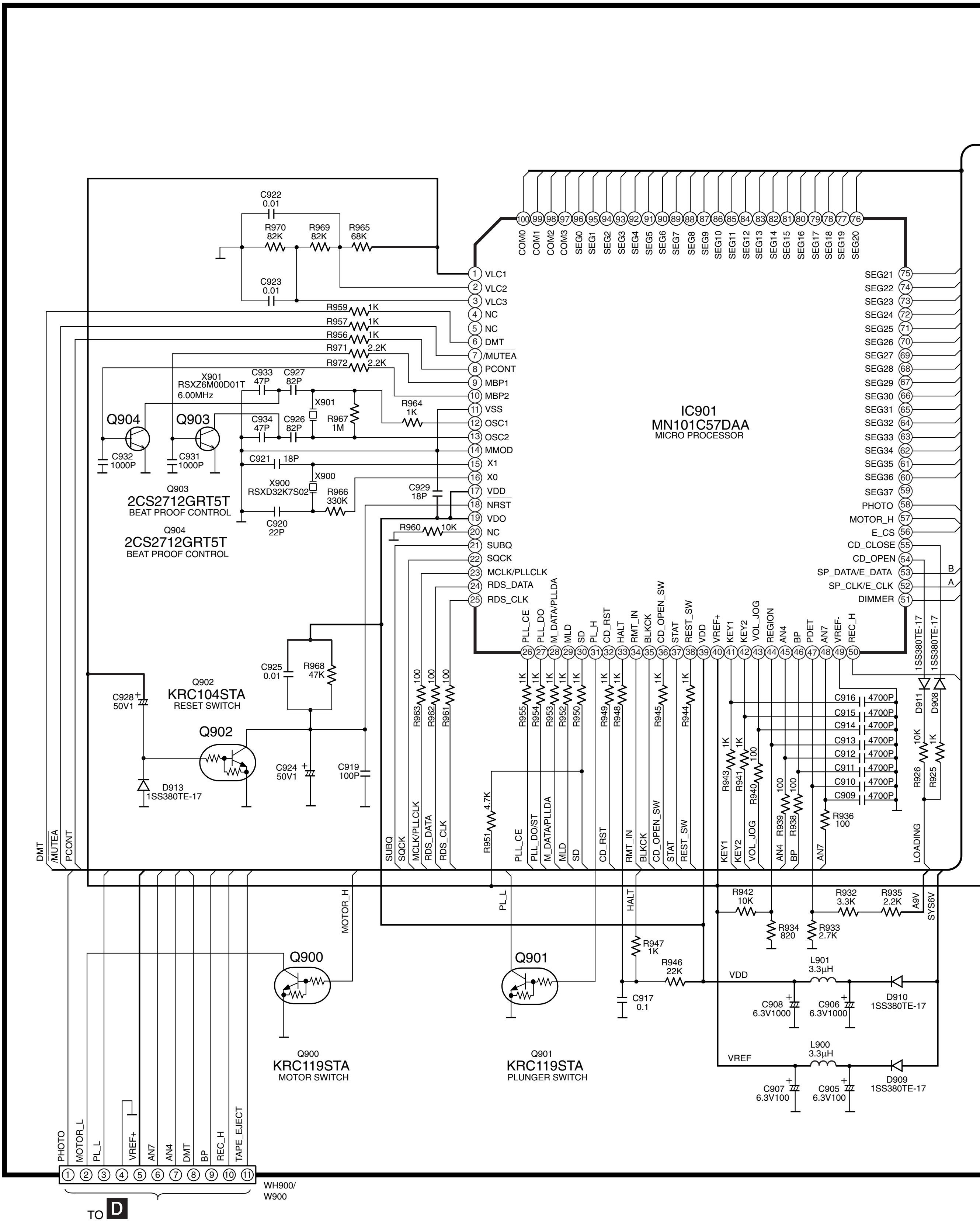


C411 0.22
R412 3.9K
R411 390K
C412 0.22
R212 3.9K
R211 390K
C211 0.22
C212 0.22
R214 8.2K
R213 12K
C214 1800P
R414 8.2K
R413 12K
C414 1800P
R216 6.8K
R215 3.9K
C215 0.027
R416 6.8K
R415 3.9K
C415 0.027
Q802
Q802 KRC102MTA MUTING CONTROL
/MUTEA
A9V
R301 33
C303 25V47
TNR_7.5V
TNR_15V
TNR_GND
LCH
RCH
A9V
MOTOR_GND
MOTOR_9V
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩
CN802A
TO G SPEAKER TERMINAL CIRCUIT (CN802B) ON SCHEMATIC DIAGRAM-11
RDS_CLK
RDS_DATA
C814 100P
R807 1K
C813 100P
R806 1K
L801 100µH
C808 6.3V47
C807 1000P
C806 0.01
C805 47P
R808 100K
RDS-ID /REA
RDCL
RDDA
RST
MODE
VDDD
VSSD
XIN
IC801 C1BB00000715 RDS IC
IC801
VREF
MPXIN
VDDA
VSSA
FLOUT
CIN
TEST
XOUT
X801 H0H433400001
C812 16V10
C811 330P
C810 16V10
C809 560P
C804 47P
R809 1K
L807 100µH
DET
D5V
Q800 KTA1266GRAT CURRENT LIMITING SWITCH
R831 100
Q800
R800 10K
R801 1.5K
Q801
Q806 KTC3199GRTA
Q806
R833 680
C834 16V100
Q801 KRC104MTA DIMMER SWITCH
VREF-
D5V
CD_DGND
9VGND
HALT
PCONT
SYS6V
LED9V
CD_7.5V
PGND
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩
CN803A
TO G SPEAKER TERMINAL CIRCUIT (CN803B) ON SCHEMATIC DIAGRAM-11
VREF-
SYS6V
PCONT
/MUTEA
SUBQ
SQCK
MCLK/PLLCLK
RDS_DATA
RDS_CLK
PLL_CE
PLL_DO/ST
M_DATA/PLLDA
MLD
SD
CD_RST
HALT
REST_SW
BLKCK
CD_OPEN_SW
STAT
A9V
DIMMER
LOADING
SP_CLK
SP_DATA
PGND
LED+B
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗
CN901B
TO C PANEL CIRCUIT (CN901A) ON SCHEMATIC DIAGRAM-8

SCHEMATIC DIAGRAM-7

C PANEL CIRCUIT

——— : +B SIGNAL LINE

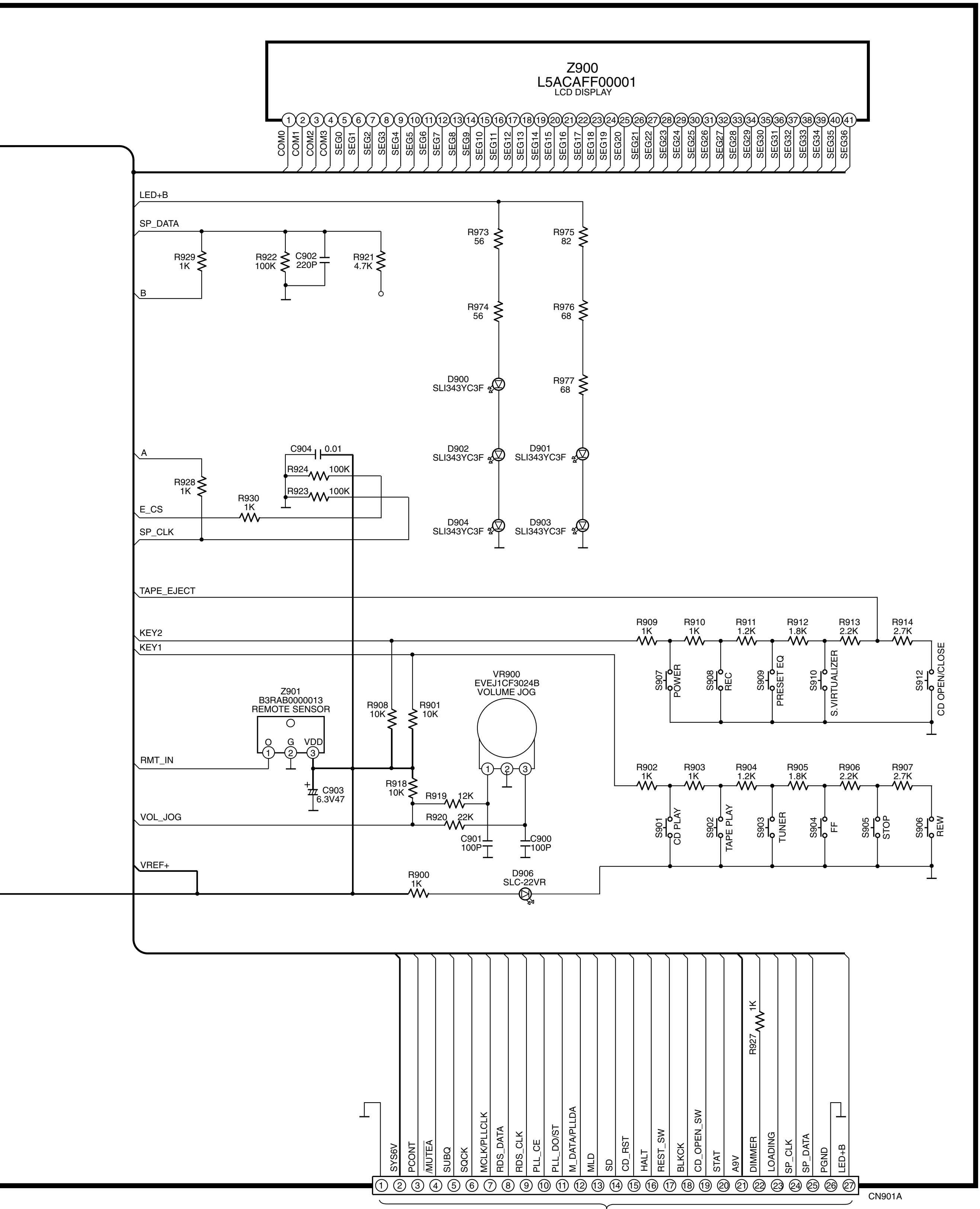

IC901
MN101C57DAA
MICRO PROCESSOR
1 VLC1
2 VLC2
3 VLC3
4 NC
5 NC
6 DMT
7 /MUTEA
8 PCONT
9 MBP1
10 MBP2
11 VSS
12 OSC1
13 OSC2
14 MMOD
15 X1
16 X0
17 VDD
18 NRST
19 VDO
20 NC
21 SUBQ
22 SQCK
23 MCLK/PLLCLK
24 RDS_DATA
25 RDS_CLK
26 PLL_CE
27 PLL_DO
28 M_DATA/PLLDA
29 MLD
30 SD
31 PL_H
32 CD_RST
33 HALT
34 RMT_IN
35 BLKCK
36 CD_OPEN_SW
37 STAT
38 REST_SW
39 VDD
40 VREF+
41 KEY1
42 KEY2
43 VOL_JOG
44 REGION
45 AN4
46 BP
47 PDET
48 AN7
49 VREF-
50 REC_H
51 DIMMER
52 SP_CLK/E_CLK
53 SP_DATA/E_DATA
54 CD_OPEN
55 CD_CLOSE
56 E_CS
57 MOTOR_H
58 PHOTO
59 SEG37
60 SEG36
61 SEG35
62 SEG34
63 SEG33
64 SEG32
65 SEG31
66 SEG30
67 SEG29
68 SEG28
69 SEG27
70 SEG26
71 SEG25
72 SEG24
73 SEG23
74 SEG22
75 SEG21
76 SEG20
77 SEG19
78 SEG18
79 SEG17
80 SEG16
81 SEG15
82 SEG14
83 SEG13
84 SEG12
85 SEG11
86 SEG10
87 SEG9
88 SEG8
89 SEG7
90 SEG6
91 SEG5
92 SEG4
93 SEG3
94 SEG2
95 SEG1
96 SEG0
97 COM3
98 COM2
99 COM1
100 COM0
C922 0.01
R970 82K
R969 82K
R965 68K
C923 0.01
R959 1K
R957 1K
R956 1K
R971 2.2K
R972 2.2K
X901 RSXZ6M00D01T 6.00MHz
C933 47P
C927 82P
X901
R967 1M
R964 1K
C934 47P
C926 82P
Q904
Q903
C932 1000P
C931 1000P
C921 18P
X900
X900 RSXD32K7S02
R966 330K
C920 22P
C929 18P
R960 10K
Q903
2CS2712GRT5T
BEAT PROOF CONTROL
Q904
2CS2712GRT5T
BEAT PROOF CONTROL
C925 0.01
R968 47K
Q902
KRC104STA
RESET SWITCH
C928 50V1
Q902
D913 1SS380TE-17
C924 50V1
C919 100P
R963 100
R962 100
R961 100
R955 1K
R954 1K
R953 1K
R952 1K
R950 1K
R949 1K
R948 1K
R945 1K
R944 1K
R951 4.7K
R943 1K
R941 1K
R940 100
R939 100
R938 100
R936 100
C916 4700P
C915 4700P
C914 4700P
C913 4700P
C912 4700P
C911 4700P
C910 4700P
C909 4700P
1SS380TE-17
1SS380TE-17
D911
D908
R926 10K
R925 1K
B
A
DMT
/MUTEA
PCONT
SUBQ
SQCK
MCLK/PLLCLK
RDS_DATA
RDS_CLK
PLL_CE
PLL_DO/ST
M_DATA/PLLDA
MLD
SD
CD_RST
RMT_IN
BLKCK
CD_OPEN_SW
STAT
REST_SW
KEY1
KEY2
VOL_JOG
AN4
BP
AN7
LOADING
MOTOR_H
PL_L
HALT
R942 10K
R934 820
R932 3.3K
R933 2.7K
R935 2.2K
A9V
SYS6V
R947 1K
R946 22K
C917 0.1
VDD
L901 3.3µH
C908 6.3V1000
C906 6.3V1000
D910 1SS380TE-17
VREF
L900 3.3µH
C907 6.3V100
C905 6.3V100
D909 1SS380TE-17
Q900
Q901
Q900
KRC119STA
MOTOR SWITCH
Q901
KRC119STA
PLUNGER SWITCH
PHOTO
MOTOR_L
PL_L
VREF+
AN7
AN4
DMT
BP
REC_H
TAPE_EJECT
1
2
3
4
5
6
7
8
9
10
11
WH900/
W900

TO D
DECK CIRCUIT
(CN1303) ON
SCHEMATIC DIAGRAM-10

SCHEMATIC DIAGRAM-8

C PANEL CIRCUIT

——— : +B SIGNAL LINE


Z900
L5ACAFF00001
LCD DISPLAY
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41
COM0 COM1 COM2 COM3 SEG0 SEG1 SEG2 SEG3 SEG4 SEG5 SEG6 SEG7 SEG8 SEG9 SEG10 SEG11 SEG12 SEG13 SEG14 SEG15 SEG16 SEG17 SEG18 SEG19 SEG20 SEG21 SEG22 SEG23 SEG24 SEG25 SEG26 SEG27 SEG28 SEG29 SEG30 SEG31 SEG32 SEG33 SEG34 SEG35 SEG36
LED+B
SP_DATA
R929 1K
R922 100K
C902 220P
R921 4.7K
B
R973 56
R974 56
R975 82
R976 68
R977 68
D900 SLI343YC3F
D902 SLI343YC3F
D901 SLI343YC3F
D904 SLI343YC3F
D903 SLI343YC3F
A
C904 0.01
R924 100K
R923 100K
R928 1K
R930 1K
E_CS
SP_CLK
TAPE_EJECT
KEY2
KEY1
R909 1K
R910 1K
R911 1.2K
R912 1.8K
R913 2.2K
R914 2.7K
S907 POWER
S908 REC
S909 PRESET EQ
S910 S.VIRTUALIZER
S912 CD OPEN/CLOSE
Z901
B3RAB0000013
REMOTE SENSOR
O G VDD
1 2 3
RMT_IN
C903 6.3V47
R908 10K
R901 10K
VR900
EVEJ1CF3024B
VOLUME JOG
1 2 3
R918 10K
R919 12K
R920 22K
C901 100P
C900 100P
VOL_JOG
R902 1K
R903 1K
R904 1.2K
R905 1.8K
R906 2.2K
R907 2.7K
S901 CD PLAY
S902 TAPE PLAY
S903 TUNER
S904 FF
S905 STOP
S906 REW
VREF+
R900 1K
D906 SLC-22VR
R927 1K
SYS6V PCONT /MUTEA SUBQ SQCK MCLK/PLLCLK RDS_DATA RDS_CLK PLL_CE PLL_DO/ST M_DATA/PLLDA MLD SD CD_RST HALT REST_SW BLKCK CD_OPEN_SW STAT A9V DIMMER LOADING SP_CLK SP_DATA PGND LED+B
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
CN901A

TO B
MAIN CIRCUIT
(CN901B) ON
SCHEMATIC DIAGRAM-6

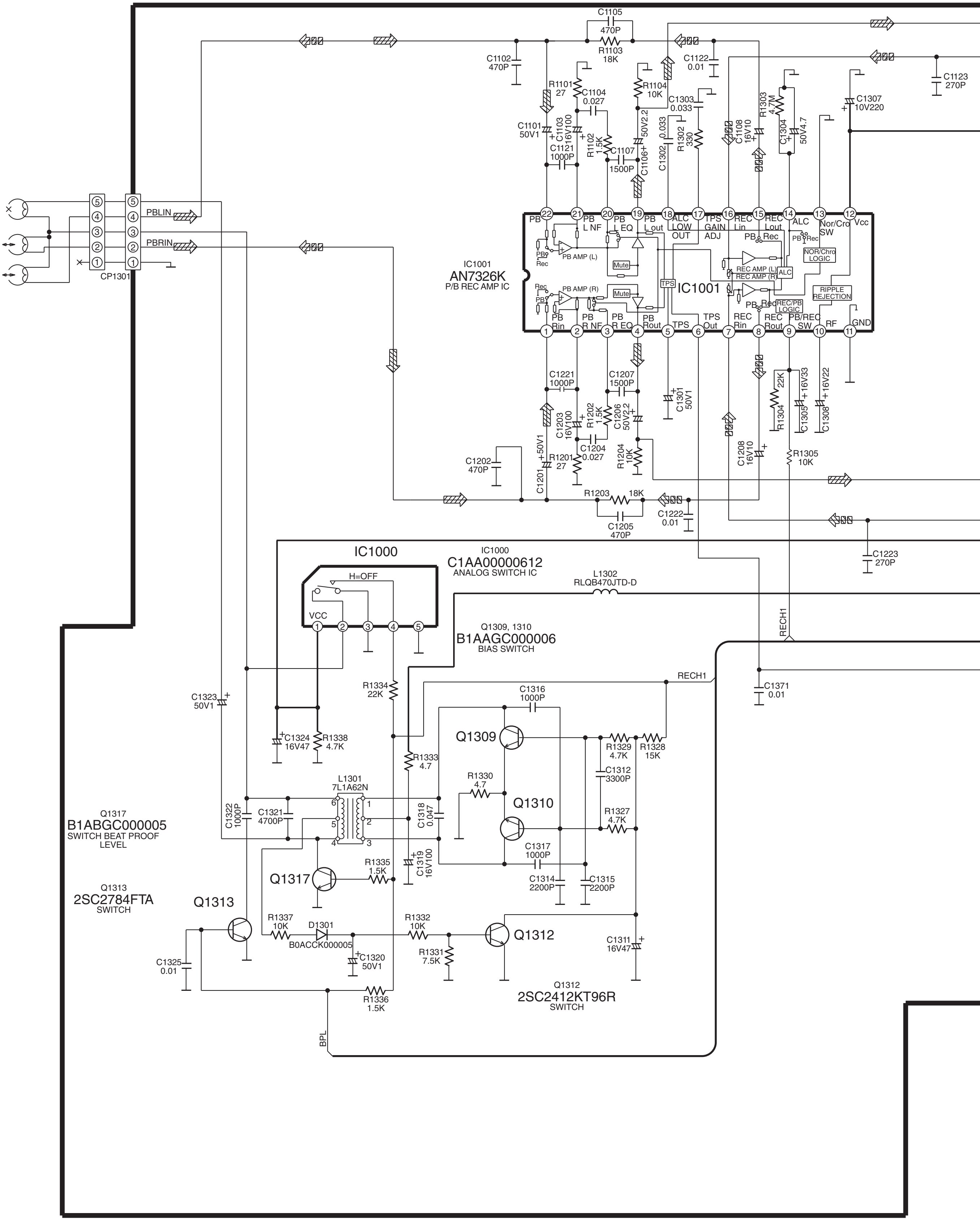
SCHEMATIC DIAGRAM-9

D DECK CIRCUIT

▨ : PLAYBACK SIGNAL LINE

― : +B SIGNAL LINE

▨ : REC SIGNAL LINE



C1105
470P
R1103
18K
C1102
470P
R1101
27
C1104
0.027
R1104
10K
C1122
0.01
C1303
0.033
R1303
4.7M
C1307
10V220
C1123
270P
C1101
50V1
C1103
16V100
C1121
1000P
R1102
1.5K
C1107
1500P
C1106
50V2.2
C1302
0.033
R1302
330
C1108
16V10
C1304
50V4.7
PB
PB L NF
PB L EQ
PB L out
ALC LOW OUT
TPS GAIN ADJ
REC Lin
REC Lout
ALC
Nor/Cro SW
Vcc
PB AMP (L)
PB
Rec
Mute
REC AMP (L)
REC AMP (R)
ALC
NOR/Chro LOGIC
RIPPLE REJECTION
TPS
IC1001
IC1001
AN7326K
P/B REC AMP IC
PB AMP (R)
REC/PB LOGIC
PB Rin
PB R NF
PB R EQ
PB Rout
TPS
TPS Out
REC Rin
REC Rout
PB/REC SW
RF
GND
PBLIN
PBRIN
CP1301
C1221
1000P
C1207
1500P
C1301
50V1
R1304
22K
C1305
16V33
C1308
16V22
C1203
16V100
R1202
1.5K
C1206
50V2.2
C1204
0.027
C1202
470P
R1201
27
C1201
50V1
R1204
10K
C1208
16V10
R1305
10K
R1203
18K
C1222
0.01
C1205
470P
C1223
270P
IC1000
IC1000
C1AA00000612
ANALOG SWITCH IC
H=OFF
VCC
L1302
RLQB470JTD-D
Q1309, 1310
B1AAGC000006
BIAS SWITCH
RECH1
RECH1
C1371
0.01
C1323
50V1
R1334
22K
C1316
1000P
C1324
16V47
R1338
4.7K
Q1309
R1329
4.7K
R1328
15K
R1333
4.7
C1312
3300P
L1301
7L1A62N
R1330
4.7
Q1310
Q1317
B1ABGC000005
SWITCH BEAT PROOF LEVEL
C1322
1000P
C1321
4700P
C1318
0.047
R1327
4.7K
C1317
1000P
R1335
1.5K
C1319
16V100
Q1317
C1314
2200P
C1315
2200P
Q1313
2SC2784FTA
SWITCH
Q1313
R1337
10K
D1301
B0ACCK000005
R1332
10K
Q1312
C1311
16V47
R1331
7.5K
C1320
50V1
C1325
0.01
R1336
1.5K
Q1312
2SC2412KT96R
SWITCH
BPL

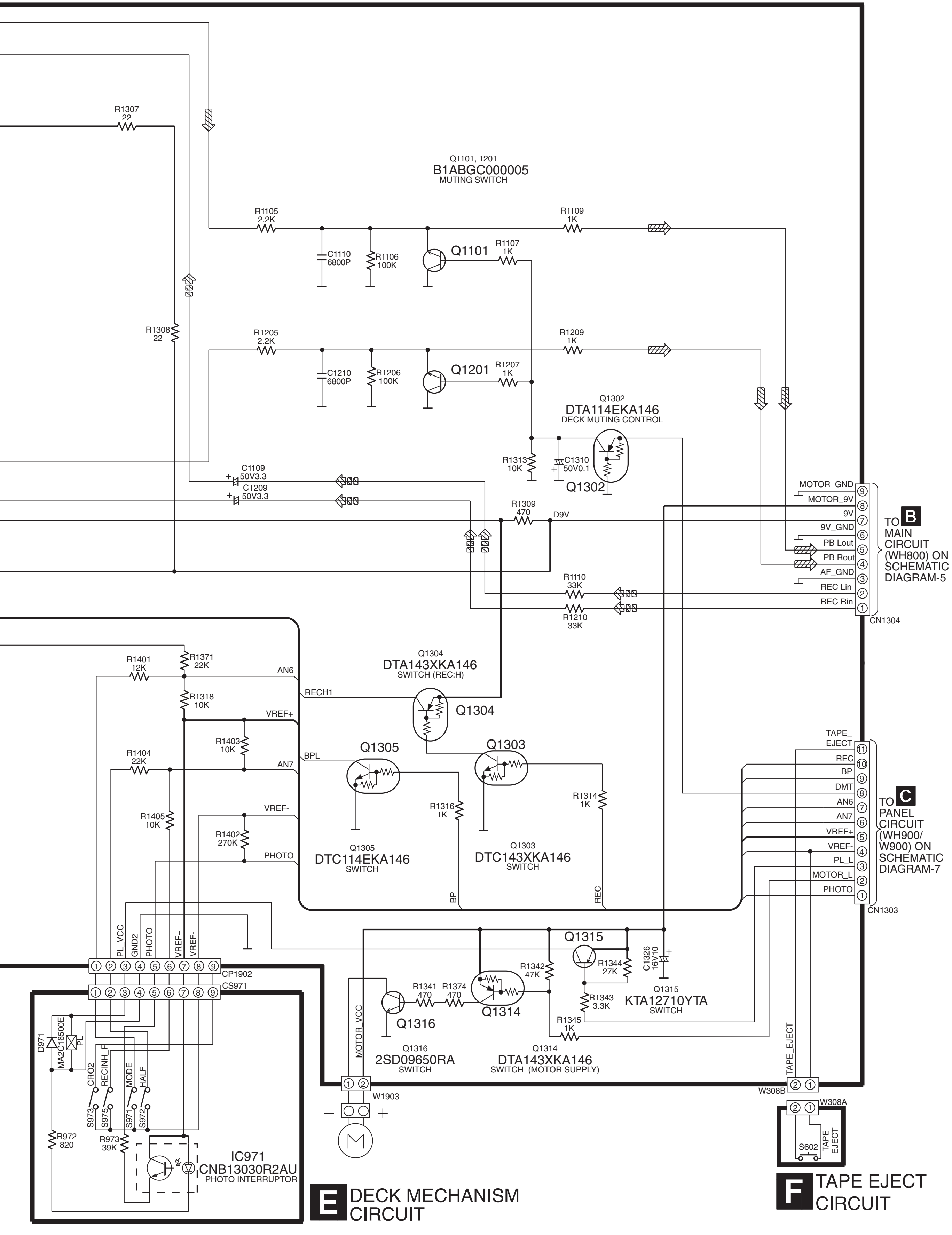
SCHEMATIC DIAGRAM-10

D DECK CIRCUIT

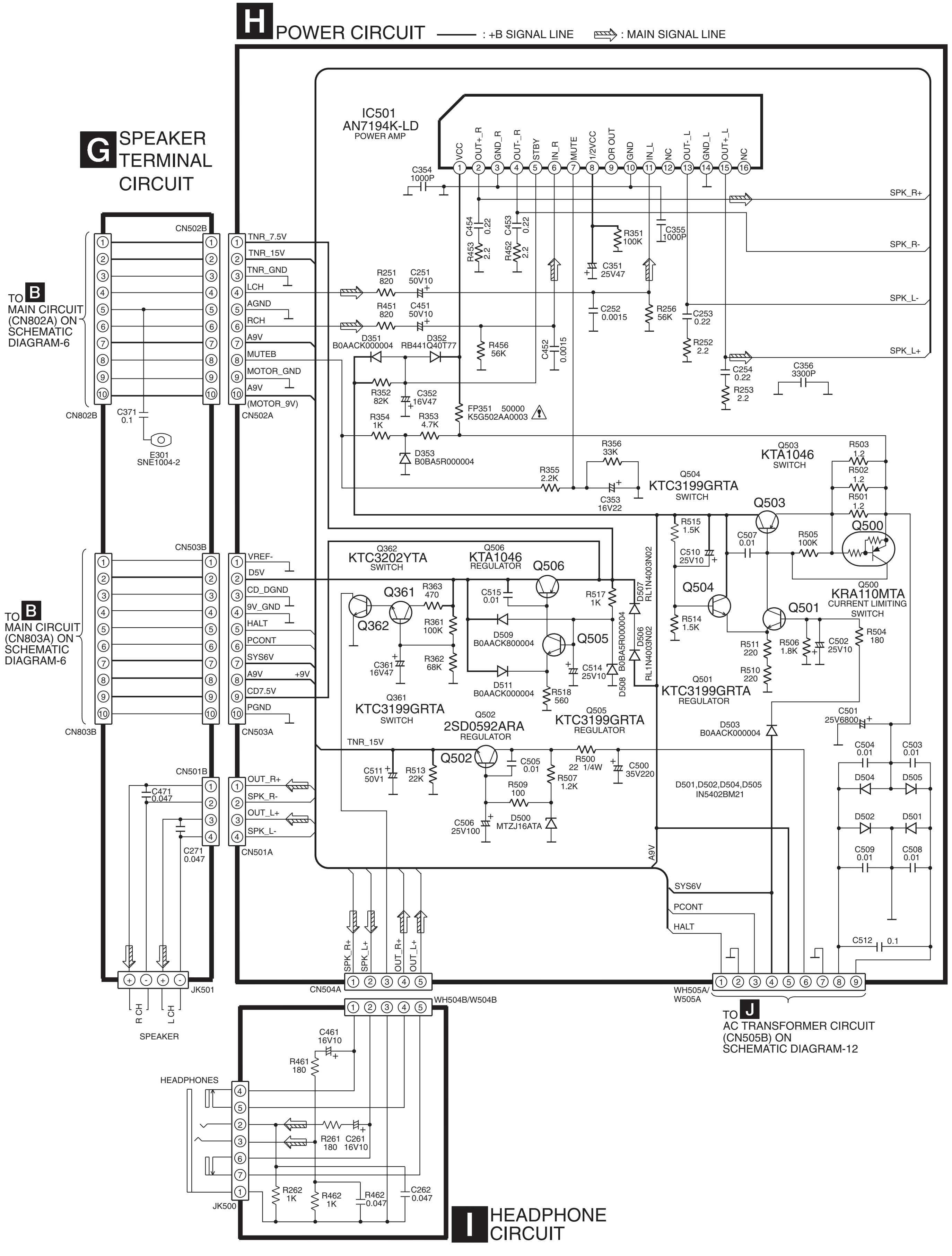
▨ : PLAYBACK SIGNAL LINE

— : +B SIGNAL LINE

▨ : REC SIGNAL LINE


R1307
22
R1308
22
Q1101, 1201
B1ABGC000005
MUTING SWITCH
R1105
2.2K
C1110
6800P
R1106
100K
Q1101
R1107
1K
R1109
1K
R1205
2.2K
C1210
6800P
R1206
100K
Q1201
R1207
1K
R1209
1K
Q1302
DTA114EKA146
DECK MUTING CONTROL
R1313
10K
C1310
50V0.1
Q1302
C1109
50V3.3
C1209
50V3.3
R1309
470
D9V
R1110
33K
R1210
33K
MOTOR_GND
MOTOR_9V
9V
9V_GND
PB Lout
PB Rout
AF_GND
REC Lin
REC Rin
CN1304
TO B MAIN CIRCUIT (WH800) ON SCHEMATIC DIAGRAM-5
R1401
12K
R1371
22K
AN6
R1318
10K
RECH1
Q1304
DTA143XKA146
SWITCH (REC:H)
Q1304
VREF+
R1403
10K
R1404
22K
AN7
BPL
Q1305
Q1303
R1405
10K
VREF-
R1402
270K
PHOTO
R1316
1K
R1314
1K
Q1305
DTC114EKA146
SWITCH
Q1303
DTC143XKA146
SWITCH
BP
REC
TAPE_EJECT
REC
BP
DMT
AN6
AN7
VREF+
VREF-
PL_L
MOTOR_L
PHOTO
CN1303
TO C PANEL CIRCUIT (WH900/ W900) ON SCHEMATIC DIAGRAM-7
PL_VCC
GND2
PHOTO
VREF+
VREF-
CP1902
CS971
Q1315
R1342
47K
R1344
27K
C1326
16V10
R1341
470
R1374
470
Q1316
Q1314
R1343
3.3K
Q1315
KTA12710YTA
SWITCH
R1345
1K
MOTOR VCC
Q1316
2SD09650RA
SWITCH
Q1314
DTA143XKA146
SWITCH (MOTOR SUPPLY)
TAPE_EJECT
W1903
W308B
W308A
S602
TAPE EJECT
D971
MA2C16500E
PL
CRO2
RECINH_F
MODE
HALF
S973
S975
S971
S972
R972
820
R973
39K
IC971
CNB13030R2AU
PHOTO INTERRUPTOR
E DECK MECHANISM CIRCUIT
F TAPE EJECT CIRCUIT

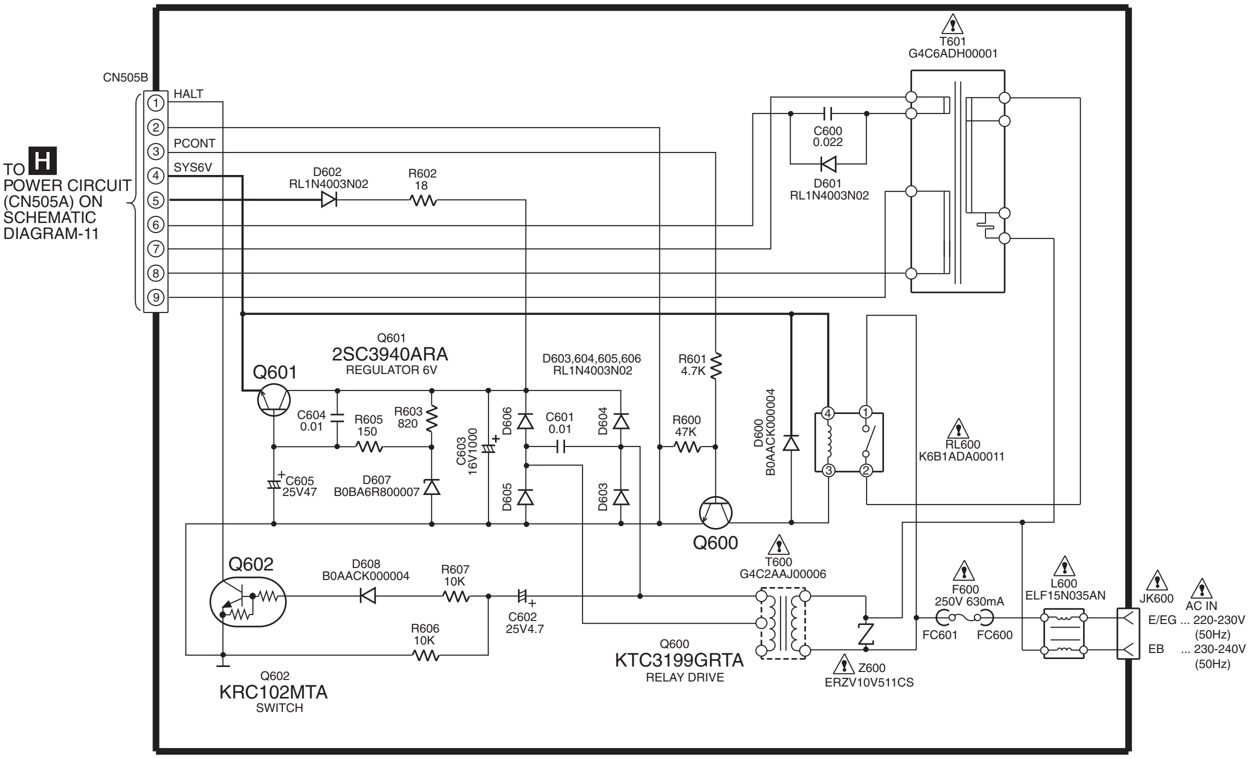
SCHEMATIC DIAGRAM-11

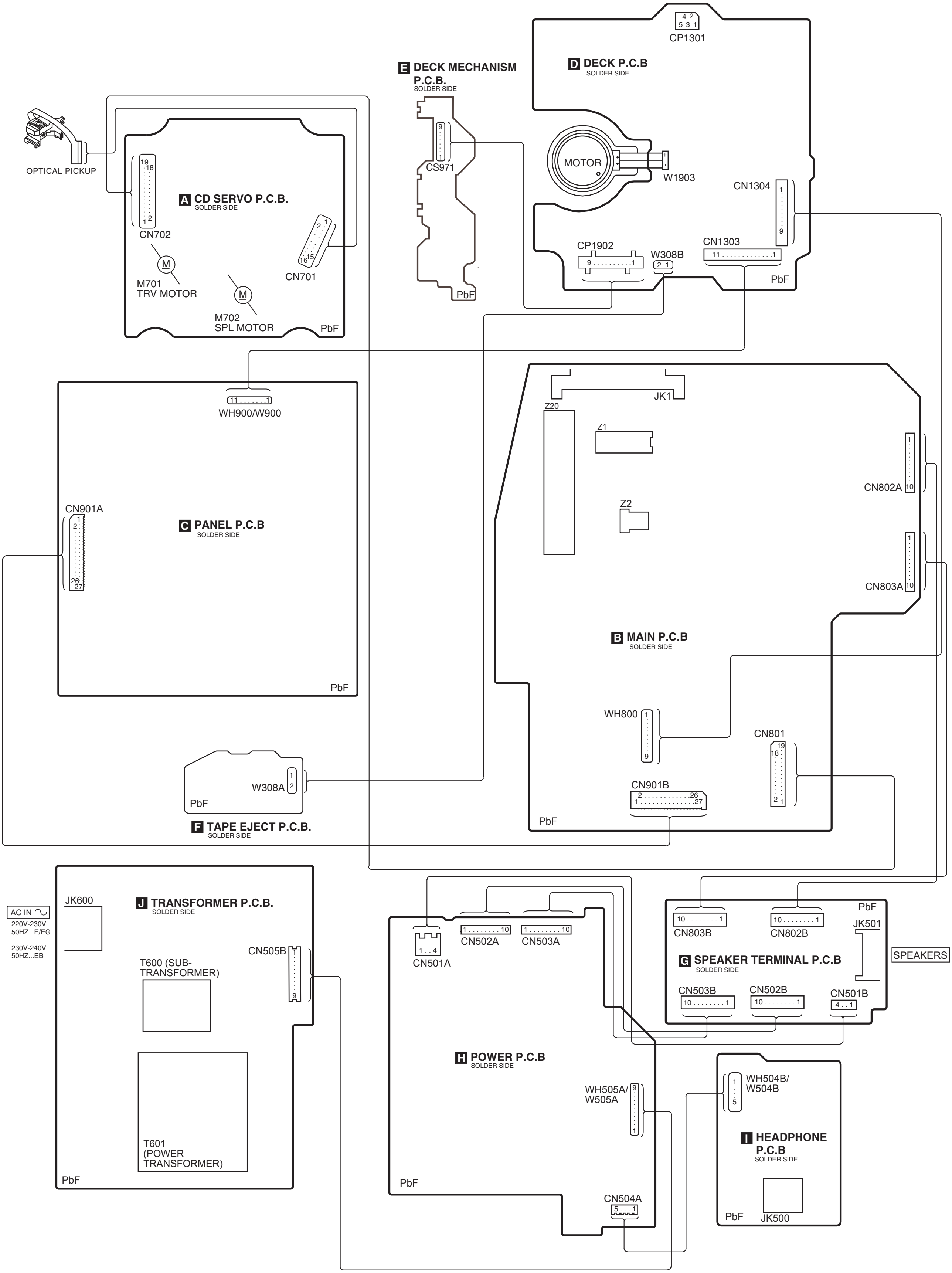

H POWER CIRCUIT
: +B SIGNAL LINE
: MAIN SIGNAL LINE
G SPEAKER TERMINAL CIRCUIT
IC501
AN7194K-LD
POWER AMP
VCC
OUT+_R
GND_R
OUT-_R
STBY
IN_R
MUTE
1/2VCC
OR OUT
GND
IN_L
NC
OUT-_L
GND_L
OUT+_L
NC
C354 1000P
C454 0.22
C453 0.22
R453 2.2
R452 2.2
R351 100K
C355 1000P
C351 25V47
SPK_R+
SPK_R-
SPK_L-
SPK_L+
R251 820
C251 50V10
R451 820
C451 50V10
C252 0.0015
R256 56K
C253 0.22
R252 2.2
R456 56K
C452 0.0015
D351 B0AACK000004
D352 RB441Q40T77
C254 0.22
R253 2.2
C356 3300P
R352 82K
C352 16V47
FP351 50000 K5G502AA0003
R354 1K
R353 4.7K
D353 B0BA5R000004
R356 33K
R355 2.2K
C353 16V22
Q503 KTA1046 SWITCH
Q504 KTC3199GRTA SWITCH
R503 1.2
R502 1.2
R501 1.2
Q503
Q500
R515 1.5K
C507 0.01
R505 100K
C510 25V10
Q504
Q500 KRA110MTA CURRENT LIMITING SWITCH
Q501
R514 1.5K
R504 180
R511 220
R506 1.8K
C502 25V10
R510 220
Q501 KTC3199GRTA REGULATOR
TO B MAIN CIRCUIT (CN802A) ON SCHEMATIC DIAGRAM-6
CN802B
CN502B
TNR_7.5V
TNR_15V
TNR_GND
LCH
AGND
RCH
A9V
MUTEB
MOTOR_GND
A9V
(MOTOR_9V)
CN502A
C371 0.1
E301 SNE1004-2
Q362 KTC3202YTA SWITCH
Q506 KTA1046 REGULATOR
Q506
Q361
R363 470
C515 0.01
R517 1K
D507 RL1N4003N02
D506 RL1N4003N02
Q362
R361 100K
D509 B0AACK800004
Q505
D508 B0BA5R000004
C361 16V47
R362 68K
C514 25V10
D511 B0AACK000004
R518 560
TO B MAIN CIRCUIT (CN803A) ON SCHEMATIC DIAGRAM-6
CN503B
VREF-
D5V
CD_DGND
9V_GND
HALT
PCONT
SYS6V
A9V
+9V
CD7.5V
PGND
CN503A
CN803B
Q361 KTC3199GRTA SWITCH
Q502 2SD0592ARA REGULATOR
Q505 KTC3199GRTA REGULATOR
D503 B0AACK000004
C501 25V6800
TNR_15V
Q502
C511 50V1
R513 22K
C505 0.01
R500 22 1/4W
C500 35V220
R507 1.2K
R509 100
C506 25V100
D500 MTZJ16ATA
C504 0.01
C503 0.01
D504
D505
D501,D502,D504,D505 IN5402BM21
D502
D501
C509 0.01
C508 0.01
CN501B
C471 0.047
C271 0.047
OUT_R+
SPK_R-
OUT_L+
SPK_L-
CN501A
A9V
SYS6V
PCONT
HALT
C512 0.1
SPK_R+
SPK_L+
OUT_R+
OUT_L+
CN504A
WH504B/W504B
WH505A/ W505A
JK501
R CH
L CH
SPEAKER
TO J AC TRANSFORMER CIRCUIT (CN505B) ON SCHEMATIC DIAGRAM-12
C461 16V10
R461 180
HEADPHONES
R261 180
C261 16V10
R262 1K
R462 1K
R462 0.047
C262 0.047
JK500
I HEADPHONE CIRCUIT

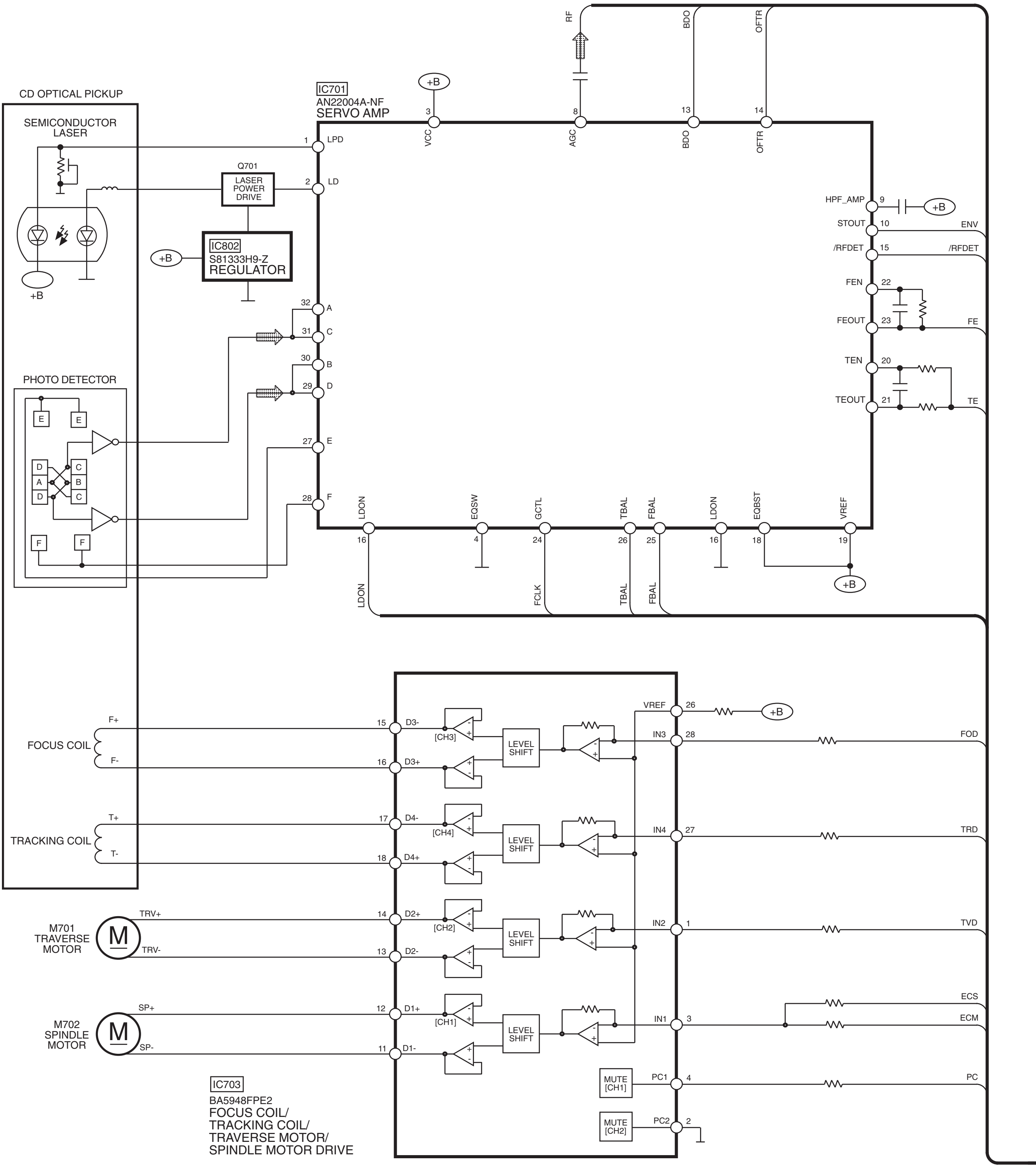
SCHEMATIC DIAGRAM-12

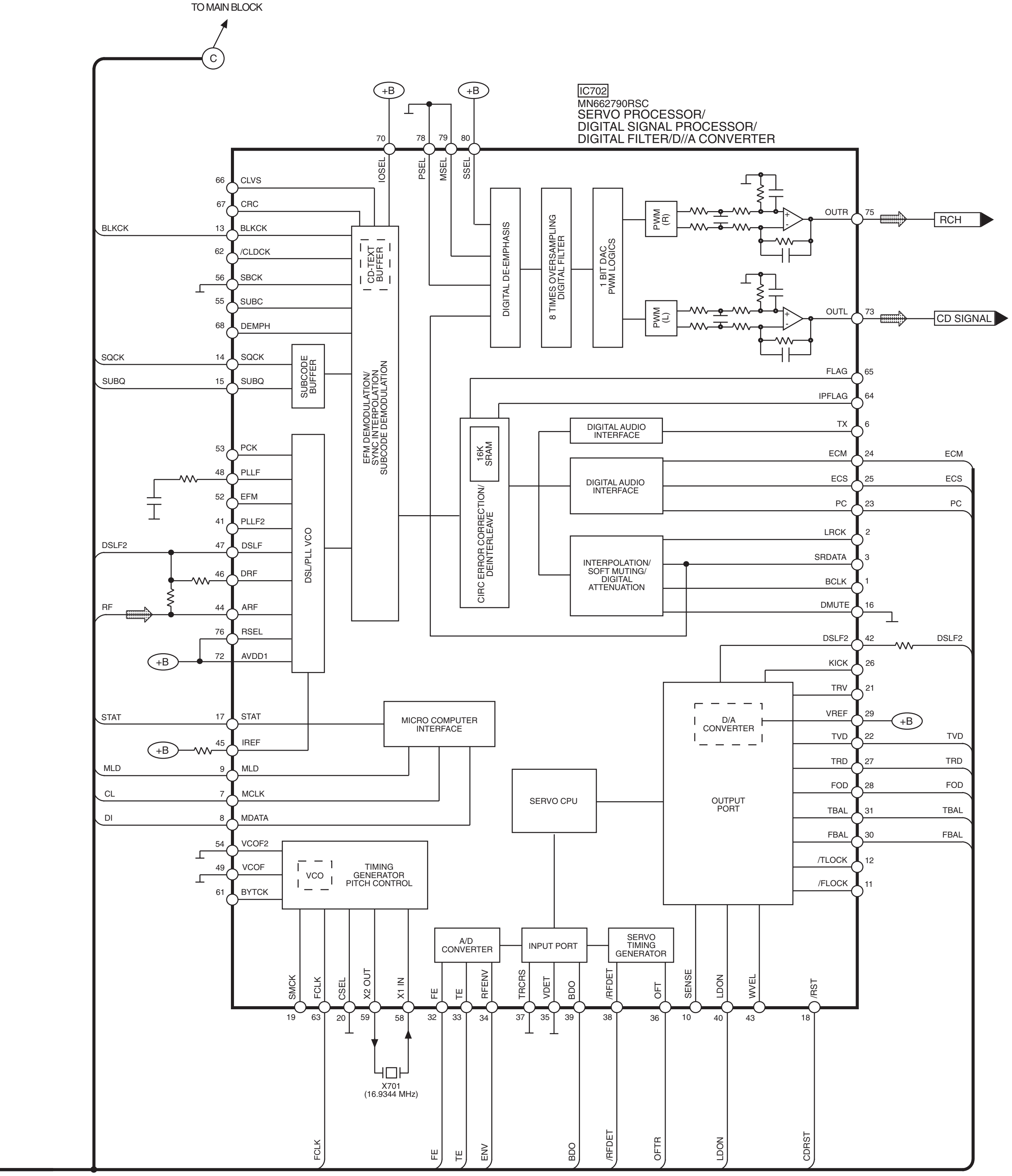
J TRANSFORMER CIRCUIT

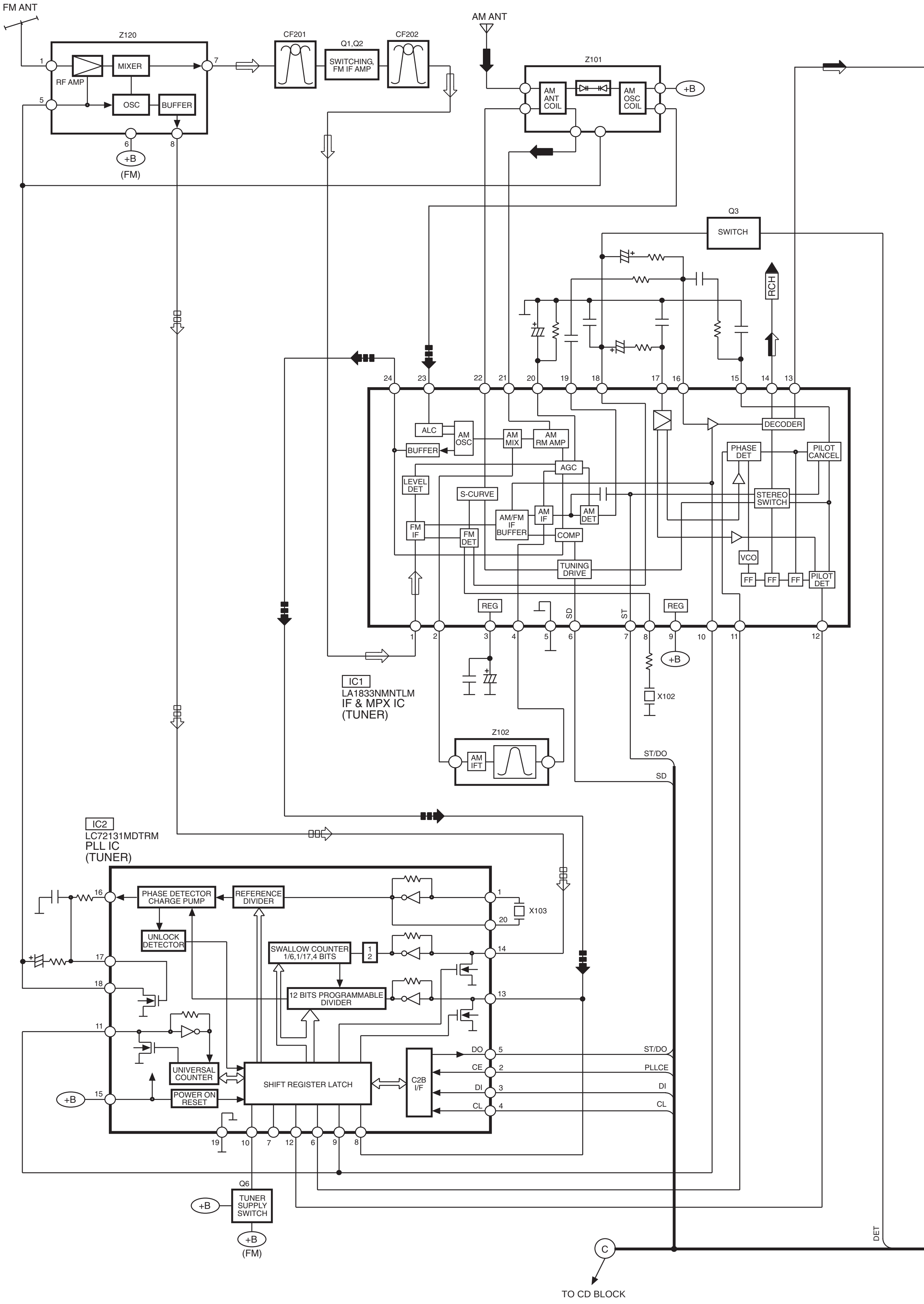
—— : +B SIGNAL LINE

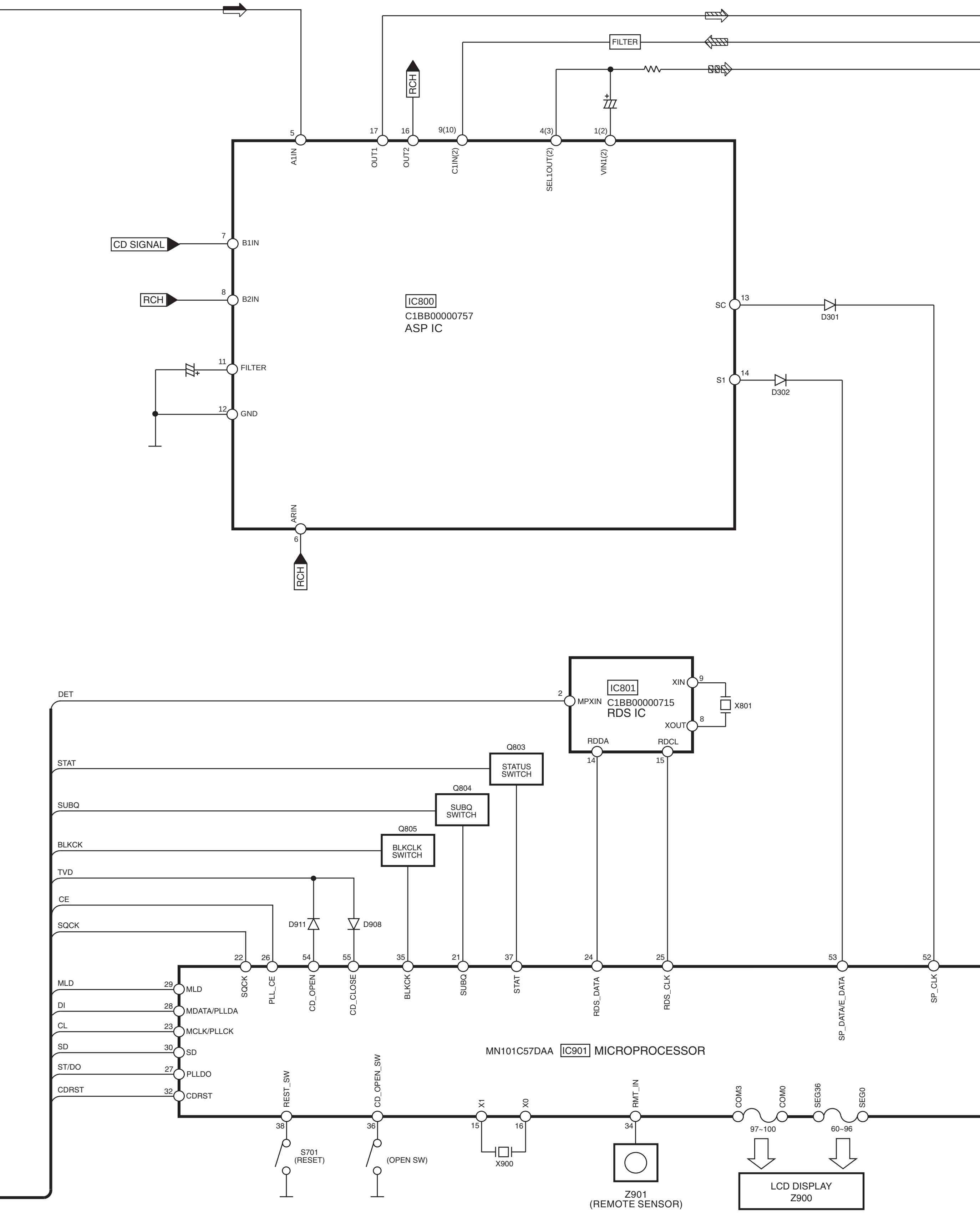

CN505B
HALT
PCONT
SYS6V
1
2
3
4
5
6
7
8
9
TO H POWER CIRCUIT (CN505A) ON SCHEMATIC DIAGRAM-11
T601
G4C6ADH00001
C600
0.022
D601
RL1N4003N02
D602
RL1N4003N02
R602
18
Q601
2SC3940ARA
REGULATOR 6V
Q601
C604
0.01
R605
150
R603
820
C605
25V47
D607
B0BA6R800007
C603
16V1000
D603,604,605,606
RL1N4003N02
D606
D605
C601
0.01
D604
D603
R601
4.7K
R600
47K
D600
B0AACK000004
Q600
RL600
K6B1ADA00011
Q602
D608
B0AACK000004
R607
10K
C602
25V4.7
R606
10K
Q602
KRC102MTA
SWITCH
Q600
KTC3199GRTA
RELAY DRIVE
T600
G4C2AAJ00006
Z600
ERZV10V511CS
F600
250V 630mA
FC601
FC600
L600
ELF15N035AN
JK600
AC IN
E/EG ... 220-230V (50Hz)
EB ... 230-240V (50Hz)

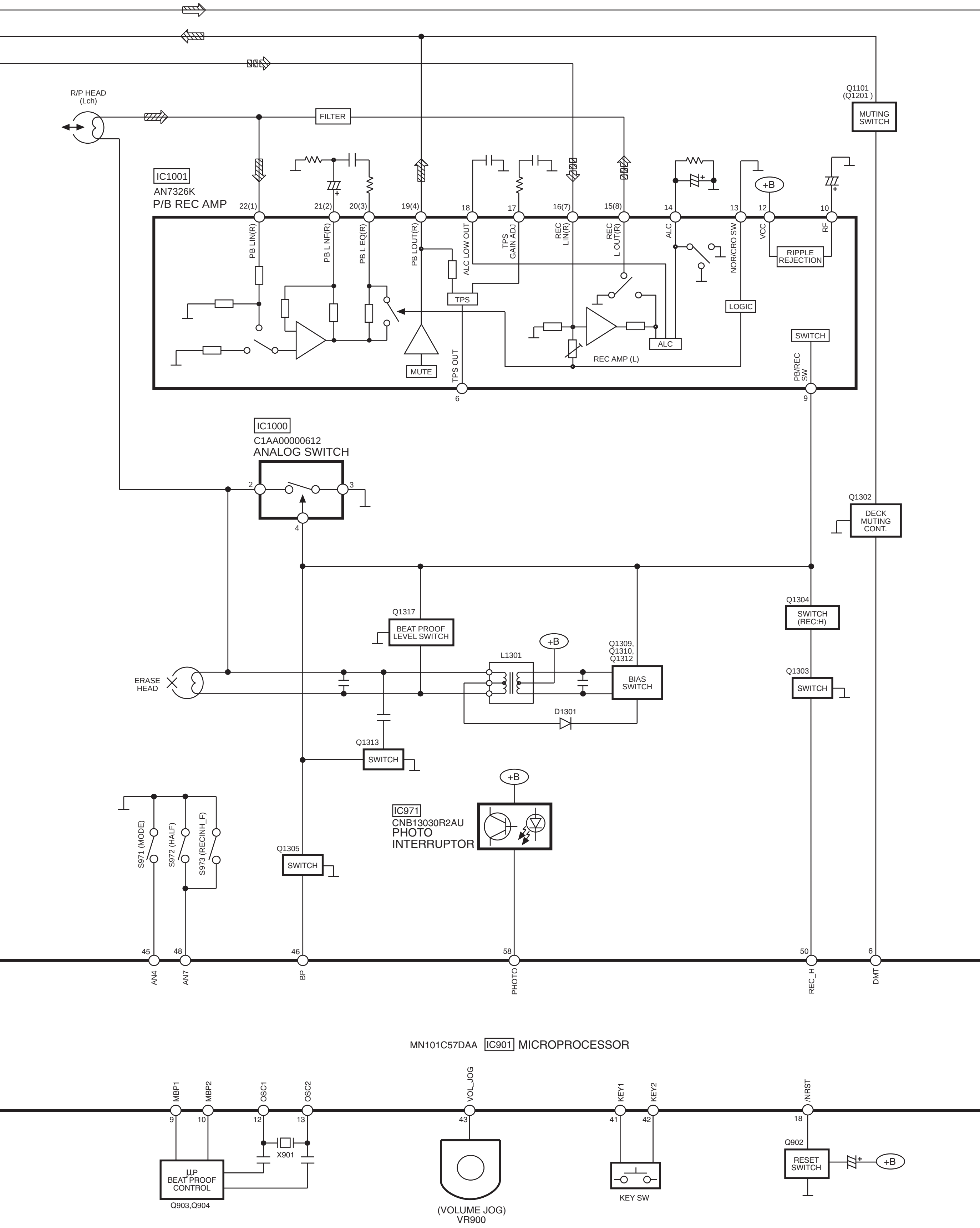

OPTICAL PICKUP
A CD SERVO P.C.B.
SOLDER SIDE
CN702
19
18
1
2
M
M701
TRV MOTOR
M
M702
SPL MOTOR
CN701
2
1
16
15
PbF
E DECK MECHANISM P.C.B.
SOLDER SIDE
9
1
CS971
PbF
CP1301
4 2
5 3 1
D DECK P.C.B
SOLDER SIDE
MOTOR
+
-
W1903
CN1304
1
9
CP1902
9 1
W308B
2 1
CN1303
11 1
PbF
C PANEL P.C.B
SOLDER SIDE
11 1
WH900/W900
CN901A
1
2
26
27
PbF
JK1
Z20
Z1
Z2
CN802A
1
10
CN803A
1
10
B MAIN P.C.B
SOLDER SIDE
WH800
1
9
CN801
19
18
2
1
CN901B
2 26
1 27
PbF
W308A
1
2
PbF
F TAPE EJECT P.C.B.
SOLDER SIDE
AC IN
220V-230V
50HZ...E/EG
230V-240V
50HZ...EB
JK600
J TRANSFORMER P.C.B.
SOLDER SIDE
T600 (SUB-TRANSFORMER)
CN505B
1
9
T601
(POWER
TRANSFORMER)
PbF
1 4
CN501A
1 10
CN502A
1 10
CN503A
H POWER P.C.B
SOLDER SIDE
WH505A/
W505A
9
1
PbF
CN504A
5 1
PbF
10 1
CN803B
10 1
CN802B
JK501
SPEAKERS
G SPEAKER TERMINAL P.C.B
SOLDER SIDE
CN503B
10 1
CN502B
10 1
CN501B
4 1
WH504B/
W504B
1
5
I HEADPHONE P.C.B
SOLDER SIDE
PbF
JK500

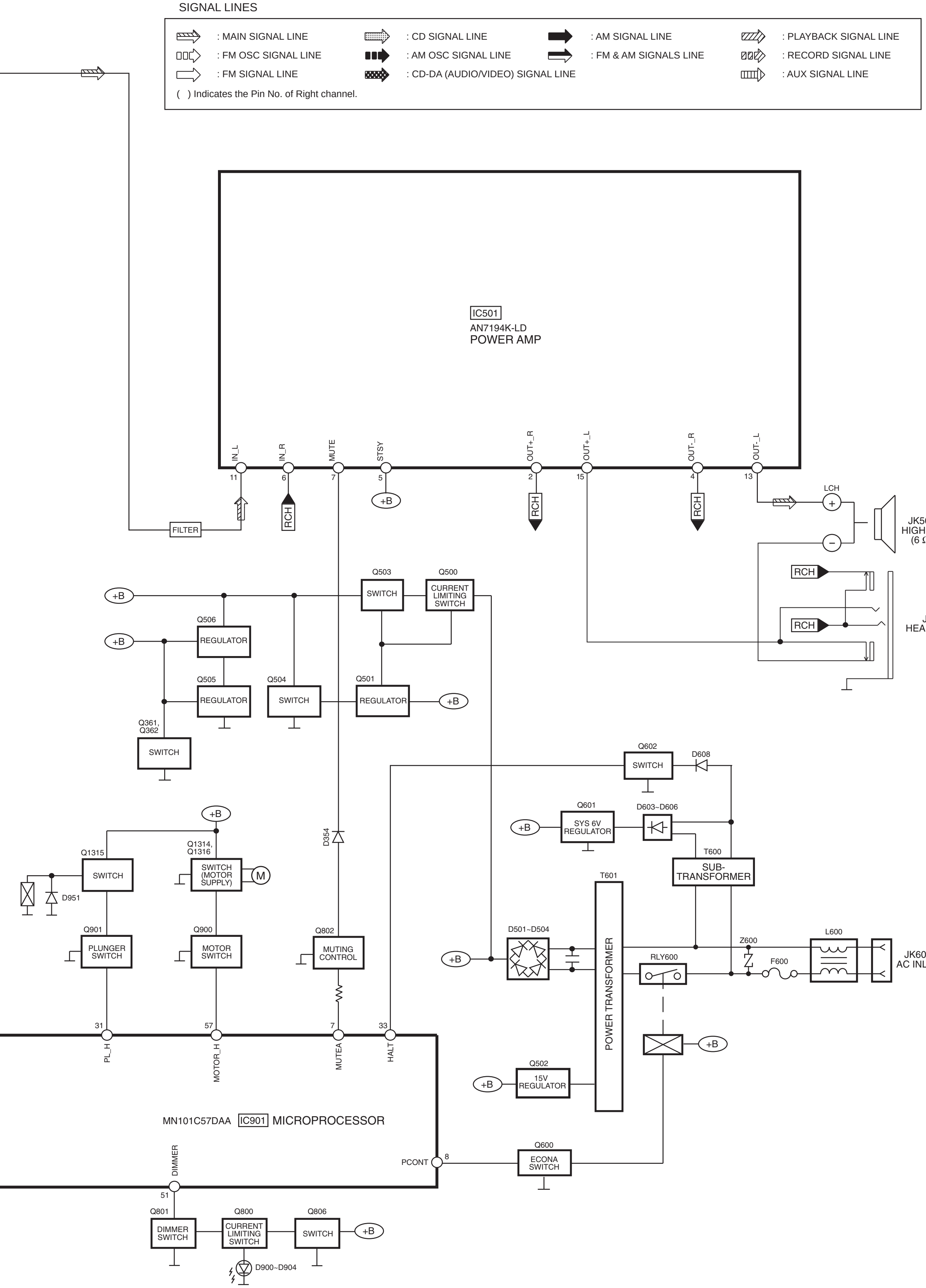

CD OPTICAL PICKUP
SEMICONDUCTOR LASER
+B
PHOTO DETECTOR
E
E
D
A
D
C
B
C
F
F
FOCUS COIL
F+
F-
TRACKING COIL
T+
T-
M701 TRAVERSE MOTOR
M
TRV+
TRV-
M702 SPINDLE MOTOR
M
SP+
SP-
Q701
LASER POWER DRIVE
IC802
S81333H9-Z
REGULATOR
+B
IC701
AN22004A-NF
SERVO AMP
+B
3
VCC
RF
8
AGC
BDO
13
BDO
OFTR
14
OFTR
1 LPD
2 LD
32 A
31 C
30 B
29 D
27 E
28 F
HPF_AMP 9
+B
STOUT 10 ENV
/RFDET 15 /RFDET
FEN 22
FEOUT 23 FE
TEN 20
TEOUT 21 TE
LDON 16
EQSW 4
GCTL 24
TBAL 26
FBAL 25
LDON 16
EQBST 18
VREF 19
+B
LDON
FCLK
TBAL
FBAL
15 D3-
[CH3]
16 D3+
17 D4-
[CH4]
18 D4+
14 D2+
[CH2]
13 D2-
12 D1+
[CH1]
11 D1-
LEVEL SHIFT
LEVEL SHIFT
LEVEL SHIFT
LEVEL SHIFT
VREF 26
+B
IN3 28 FOD
IN4 27 TRD
IN2 1 TVD
IN1 3
ECS
ECM
MUTE [CH1]
PC1 4 PC
MUTE [CH2]
PC2 2
IC703
BA5948FPE2
FOCUS COIL/
TRACKING COIL/
TRAVERSE MOTOR/
SPINDLE MOTOR DRIVE


TO MAIN BLOCK
C
IC702
MN662790RSC
SERVO PROCESSOR/
DIGITAL SIGNAL PROCESSOR/
DIGITAL FILTER/D//A CONVERTER
+B
70 IOSEL
78 PSEL
79 MSEL
80 SSEL
66 CLVS
67 CRC
BLKCK 13 BLKCK
62 /CLDCK
56 SBCK
55 SUBC
68 DEMPH
SQCK 14 SQCK
SUBQ 15 SUBQ
53 PCK
48 PLLF
52 EFM
41 PLLF2
DSLF2 47 DSLF
46 DRF
RF 44 ARF
76 RSEL
72 AVDD1
STAT 17 STAT
45 IREF
MLD 9 MLD
CL 7 MCLK
DI 8 MDATA
54 VCOF2
49 VCOF
61 BYTCK
CD-TEXT BUFFER
SUBCODE BUFFER
EFM DEMODULATION/ SYNC INTERPOLATION SUBCODE DEMODULATION
DSL/PLL VCO
DIGITAL DE-EMPHASIS
8 TIMES OVERSAMPLING DIGITAL FILTER
1 BIT DAC PWM LOGICS
PWM (R)
PWM (L)
OUTR 75
RCH
OUTL 73
CD SIGNAL
FLAG 65
IPFLAG 64
16K SRAM
CIRC ERROR CORRECTION/ DEINTERLEAVE
DIGITAL AUDIO INTERFACE
TX 6
ECM 24 ECM
ECS 25 ECS
PC 23 PC
LRCK 2
SRDATA 3
BCLK 1
DMUTE 16
INTERPOLATION/ SOFT MUTING/ DIGITAL ATTENUATION
DSLF2 42 DSLF2
KICK 26
TRV 21
VREF 29
D/A CONVERTER
TVD 22 TVD
TRD 27 TRD
FOD 28 FOD
TBAL 31 TBAL
FBAL 30 FBAL
/TLOCK 12
/FLOCK 11
OUTPUT PORT
MICRO COMPUTER INTERFACE
SERVO CPU
VCO
TIMING GENERATOR PITCH CONTROL
A/D CONVERTER
INPUT PORT
SERVO TIMING GENERATOR
SMCK 19
FCLK 63
CSEL 20
X2 OUT 59
X1 IN 58
FE 32
TE 33
RFENV 34
TRCRS 37
VDET 35
BDO 39
/RFDET 38
OFT 36
SENSE 10
LDON 40
WVEL 43
/RST 18
X701
(16.9344 MHz)
FCLK
FE
TE
ENV
BDO
/RFDET
OFTR
LDON
CDRST

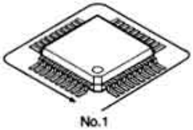

FM ANT
Z120
1
RF AMP
MIXER
7
5
OSC
BUFFER
6
8
+B
(FM)
CF201
Q1,Q2
SWITCHING, FM IF AMP
CF202
AM ANT
Z101
AM ANT COIL
AM OSC COIL
+B
Q3
SWITCH
RCH
24
23
22
21
20
19
18
17
16
15
14
13
ALC
AM OSC
AM MIX
AM RM AMP
BUFFER
AGC
DECODER
PHASE DET
PILOT CANCEL
LEVEL DET
S-CURVE
STEREO SWITCH
AM/FM IF BUFFER
AM IF
AM DET
FM IF
FM DET
COMP
VCO
TUNING DRIVE
FF
FF
FF
PILOT DET
REG
REG
SD
ST
1
2
3
4
5
6
7
8
9
10
11
12
+B
X102
IC1
LA1833NMNTLM
IF & MPX IC
(TUNER)
Z102
AM IFT
ST/DO
SD
IC2
LC72131MDTRM
PLL IC
(TUNER)
16
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
1
X103
20
UNLOCK DETECTOR
17
SWALLOW COUNTER 1/6,1/17,4 BITS
1 2
14
18
12 BITS PROGRAMMABLE DIVIDER
13
11
UNIVERSAL COUNTER
SHIFT REGISTER LATCH
C2B I/F
DO
5
ST/DO
CE
2
PLLCE
DI
3
DI
CL
4
CL
+B
15
POWER ON RESET
19
10
7
12
6
9
8
Q6
+B
TUNER SUPPLY SWITCH
+B
(FM)
DET
C
TO CD BLOCK


FILTER
RCH
5
17
16
9(10)
4(3)
1(2)
A1IN
OUT1
OUT2
C1IN(2)
SEL1OUT(2)
VIN1(2)
CD SIGNAL
7
B1IN
RCH
8
B2IN
IC800
C1BB00000757
ASP IC
11
FILTER
12
GND
SC
13
D301
S1
14
D302
ARIN
6
RCH
DET
2
MPXIN
IC801
C1BB00000715
RDS IC
XIN
9
X801
XOUT
8
RDDA
RDCL
14
15
Q803
STATUS SWITCH
STAT
Q804
SUBQ SWITCH
SUBQ
Q805
BLKCLK SWITCH
BLKCK
TVD
CE
D911
D908
SQCK
22
26
54
55
35
21
37
24
25
53
52
SQCK
PLL_CE
CD_OPEN
CD_CLOSE
BLKCK
SUBQ
STAT
RDS_DATA
RDS_CLK
SP_DATA/E_DATA
SP_CLK
MLD
29
MLD
DI
28
MDATA/PLLDA
CL
23
MCLK/PLLCK
SD
30
SD
ST/DO
27
PLLDO
CDRST
32
CDRST
MN101C57DAA
IC901
MICROPROCESSOR
REST_SW
CD_OPEN_SW
X1
X0
RMT_IN
COM3
COM0
SEG36
SEG0
38
36
15
16
34
97~100
60~96
S701
(RESET)
(OPEN SW)
X900
Z901
(REMOTE SENSOR)
LCD DISPLAY
Z900

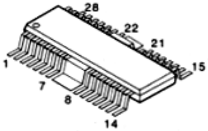

R/P HEAD
(Lch)
FILTER
Q1101
(Q1201)
MUTING
SWITCH
IC1001
AN7326K
P/B REC AMP
+B
22(1)
21(2)
20(3)
19(4)
18
17
16(7)
15(8)
14
13
12
10
PB LIN(R)
PB L NF(R)
PB L EQ(R)
PB LOUT(R)
ALC LOW OUT
TPS
GAIN ADJ
REC
LIN(R)
REC
L OUT(R)
ALC
NOR/CRO SW
VCC
RF
RIPPLE
REJECTION
TPS
LOGIC
MUTE
ALC
REC AMP (L)
SWITCH
TPS OUT
PB/REC
SW
6
9
IC1000
C1AA00000612
ANALOG SWITCH
2
3
4
Q1302
DECK
MUTING
CONT.
Q1317
BEAT PROOF
LEVEL SWITCH
Q1304
SWITCH
(REC:H)
+B
L1301
Q1309,
Q1310,
Q1312
BIAS
SWITCH
ERASE
HEAD
Q1303
SWITCH
D1301
Q1313
SWITCH
+B
IC971
CNB13030R2AU
PHOTO
INTERRUPTOR
S971 (MODE)
S972 (HALF)
S973 (RECINH_F)
Q1305
SWITCH
45
48
46
58
50
6
AN4
AN7
BP
PHOTO
REC_H
DMT
MN101C57DAA
IC901
MICROPROCESSOR
MBP1
MBP2
OSC1
OSC2
VOL_JOG
KEY1
KEY2
/NRST
9
10
12
13
43
41
42
18
X901
μP
BEAT PROOF
CONTROL
Q903,Q904
(VOLUME JOG)
VR900
KEY SW
Q902
RESET
SWITCH
+B

SIGNAL LINES
: MAIN SIGNAL LINE
: FM OSC SIGNAL LINE
: FM SIGNAL LINE
: CD SIGNAL LINE
: AM OSC SIGNAL LINE
: CD-DA (AUDIO/VIDEO) SIGNAL LINE
: AM SIGNAL LINE
: FM & AM SIGNALS LINE
: PLAYBACK SIGNAL LINE
: RECORD SIGNAL LINE
: AUX SIGNAL LINE
( ) Indicates the Pin No. of Right channel.
IC501
AN7194K-LD
POWER AMP
IN_L
IN_R
MUTE
STSY
OUT+_R
OUT+_L
OUT-_R
OUT-_L
11
6
7
5
2
15
4
13
FILTER
RCH
+B
RCH
RCH
LCH
+
-
JK501
HIGH CH
(6 Ω)
RCH
RCH
JK500
HEADPHONE
Q503
SWITCH
Q500
CURRENT LIMITING SWITCH
+B
Q506
REGULATOR
+B
Q505
REGULATOR
Q504
SWITCH
Q501
REGULATOR
+B
Q361, Q362
SWITCH
Q602
SWITCH
D608
Q601
SYS 6V REGULATOR
D603~D606
+B
T600
SUB-TRANSFORMER
T601
POWER TRANSFORMER
+B
Q1315
SWITCH
Q1314, Q1316
SWITCH (MOTOR SUPPLY)
M
D951
D354
Q901
PLUNGER SWITCH
Q900
MOTOR SWITCH
Q802
MUTING CONTROL
D501~D504
+B
Z600
L600
JK600
AC INLET
RLY600
F600
+B
31
57
7
33
PL_H
MOTOR_H
MUTEA
HALT
Q502
+B
15V REGULATOR
MN101C57DAA
IC901
MICROPROCESSOR
DIMMER
51
PCONT
8
Q600
ECONA SWITCH
Q801
DIMMER SWITCH
Q800
CURRENT LIMITING SWITCH
Q806
SWITCH
+B
D900~D904

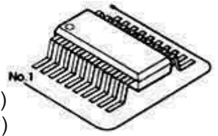
MN662790RSC(80P)
MN101C57DAA(100P)



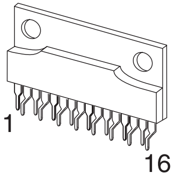
BA5948FPE2


28
22
21
15
1
7
8
14

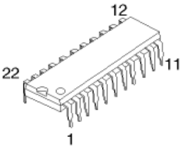
AN22004A-NF (32P)
C1BB00000757 (24P)
C1BB00000715 (16P)
LA1833NMNTLM (24P)
LC72131MDTRM (20P)



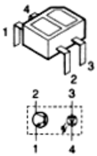
AN7194K-LD



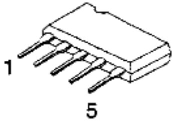
AK7326K



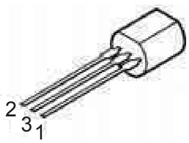
CNB13030R2AU



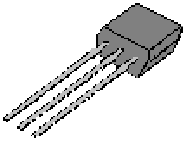
C1AA00000612



S81333HG-Z

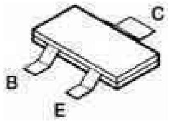


B1AAAD000014

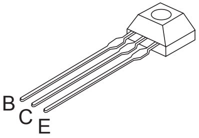


B1ABGC000005
2SA1037AKSTX
2SC2412KT96R
DTA114EKA146
DTA143XKA146
DTC143XKA146
DTC114EKA146

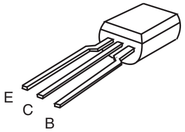
2SC2712GRT5T
KRC104STA



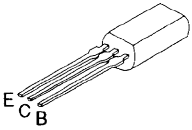
KRA102MTA
KRC102MTA
KRC104MTA
KRA110MTA
KTC3199GRTA
2SC3311ARTA



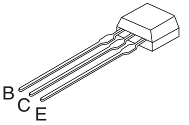
KTA1266GRAT



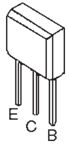
2SC3940ARA



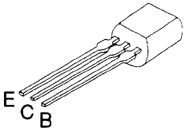
B1AAGC000006



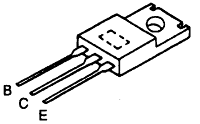
2SC2784FTA



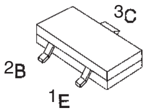
KTA12710YTA
KRC101MTA
KTC3202YTA
2SD0592ARA
2SD09650RA



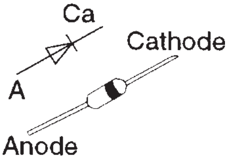
KTA1046



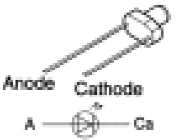
KRC119STA



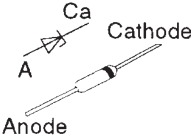
B0AACK000004
MA2C16500E
RB441Q40T77


Ca
Cathode
A
Anode

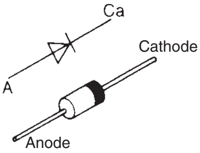
SLC-22VR


Anode
Cathode
A
Ca

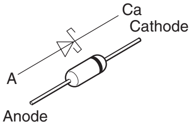
MTZJ16ATA
B0BA5R000004
B0BA6R800007


Ca
Cathode
A
Anode

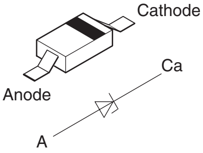
RL1N4003N02


Ca
Cathode
A
Anode

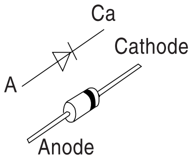
MA2C700A0F


Ca
Cathode
A
Anode

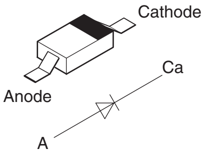
B0ACCK000005


Cathode
Anode
Ca
A

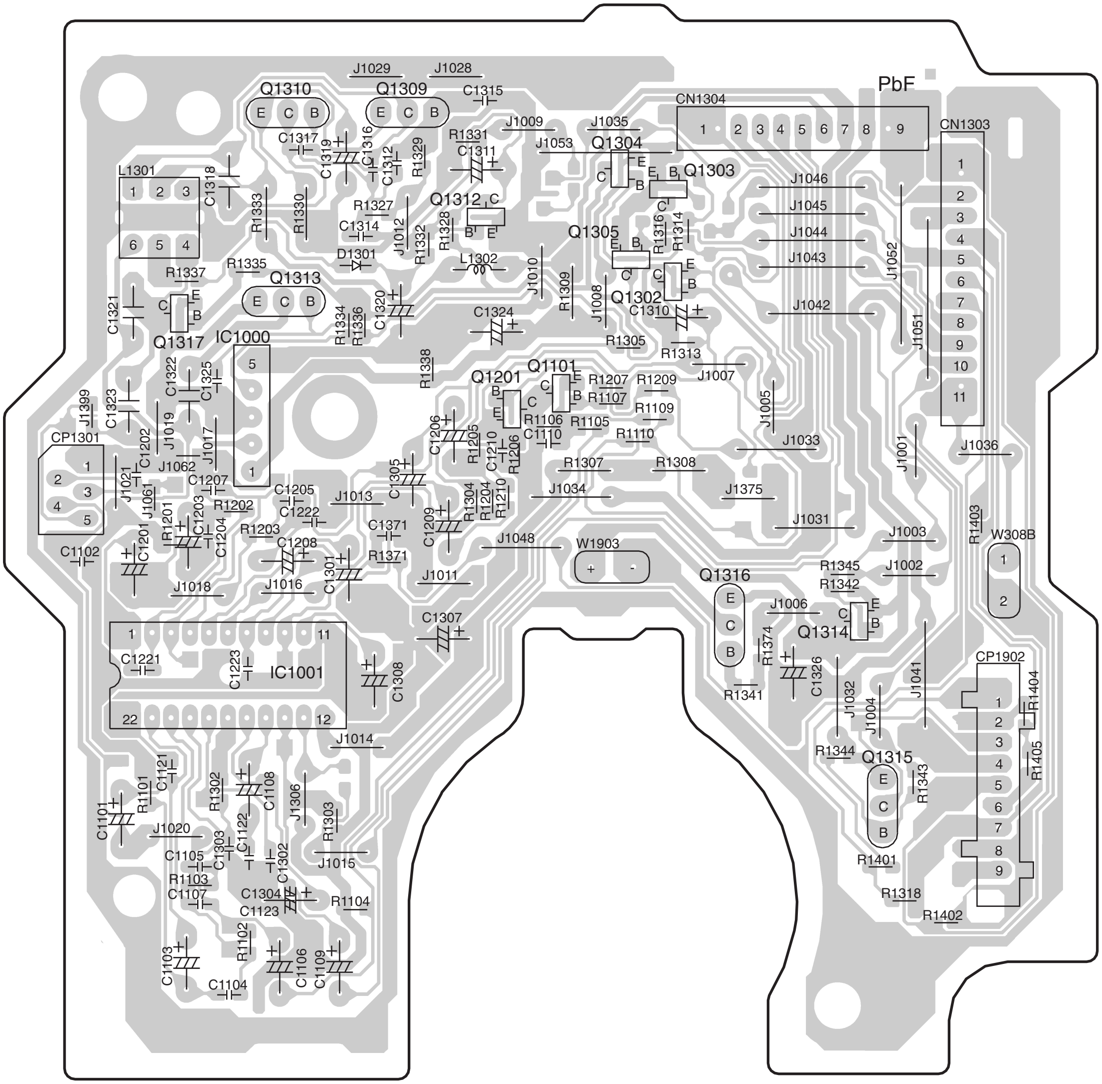
1N5402BM21


Ca
Cathode
A
Anode

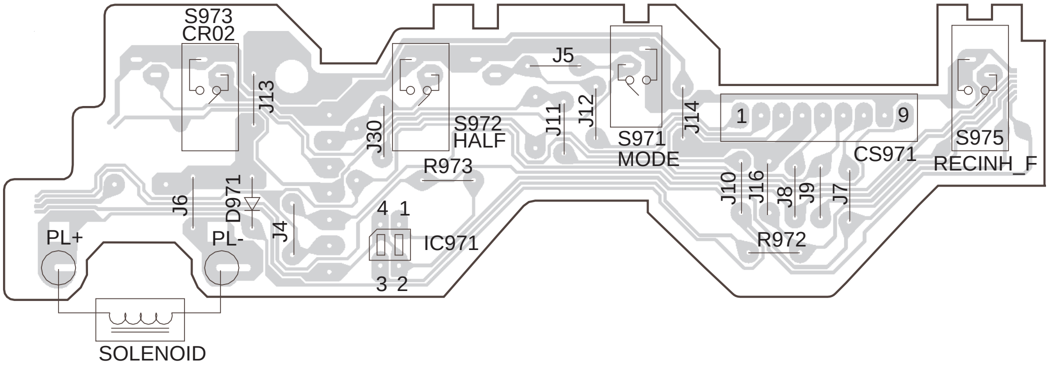
1SS380TE-17
MAZ8056ML


Cathode
Anode
Ca
A

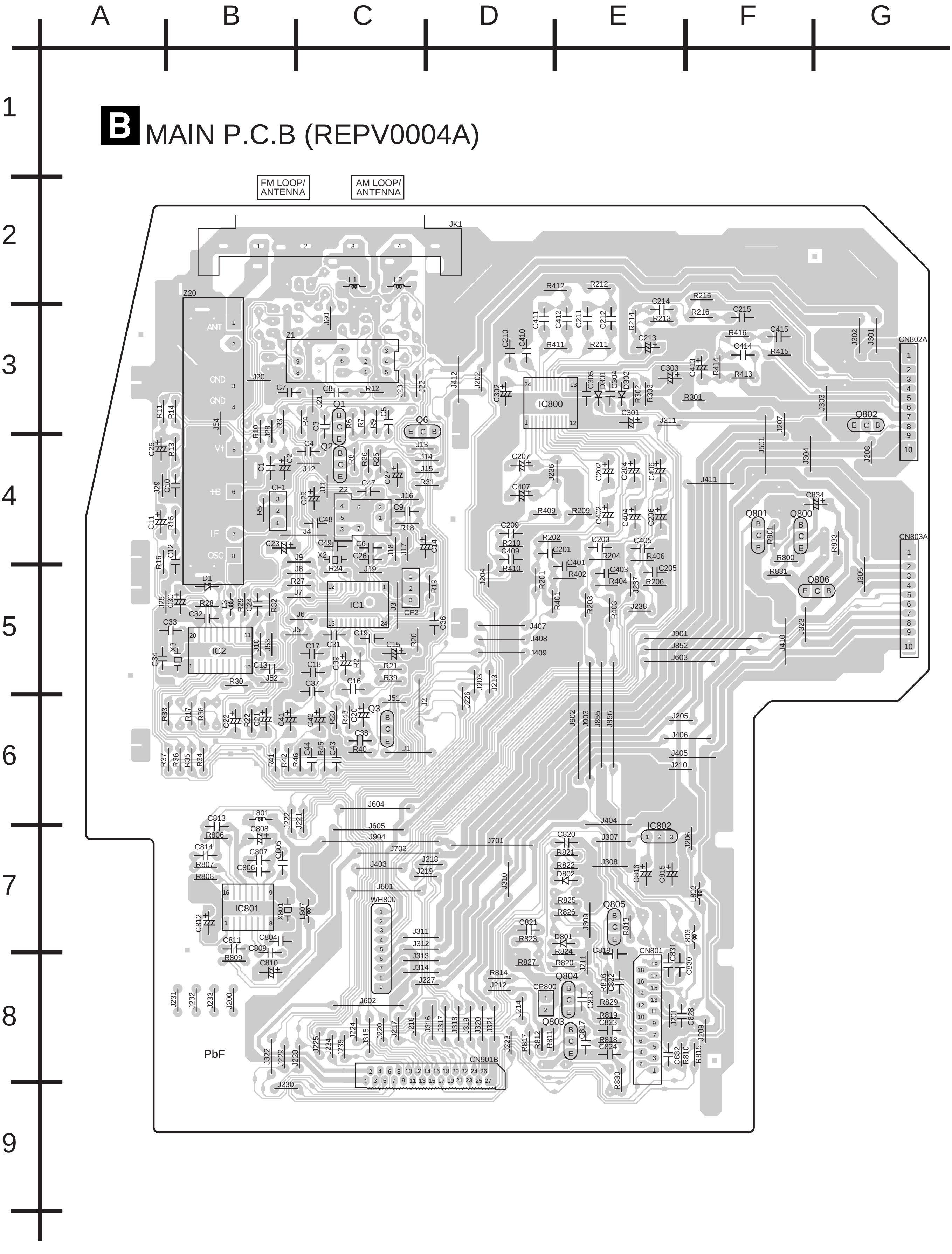
D DECK P.C.B (REPX0350C)


A B C D E F G
1 2 3 4 5 6 7 8 9
PbF
Q1310 E C B
Q1309 E C B
J1029
J1028
C1315
C1317
C1319
C1316
C1312
R1329
R1331
C1311
J1009
J1053
J1035
Q1304
CN1304
1 2 3 4 5 6 7 8 9
CN1303
1 2 3 4 5 6 7 8 9 10 11
Q1303
L1301
1 2 3
6 5 4
C1318
R1333
R1330
R1327
C1314
J1012
R1332
R1328
Q1312
J1046
J1045
J1044
J1043
J1042
J1052
J1051
D1301
L1302
J1010
R1309
J1008
Q1305
R1316
R1314
Q1302
C1310
R1313
R1305
R1337
R1335
Q1313 E C B
C1321
Q1317
IC1000
R1334
R1336
C1320
C1324
R1338
Q1201
Q1101
R1207
R1209
R1107
R1109
J1007
J1005
J1001
J1036
J1399
C1323
C1322
C1325
CP1301
1 2 3 4 5
C1202
J1019
J1017
J1062
C1206
R1205
C1210
R1206
R1106
C1110
R1105
R1110
J1033
R1307
R1308
J1021
J1061
C1207
C1203
C1204
R1202
R1201
C1201
C1205
C1222
J1013
C1305
C1209
R1304
R1204
R1210
J1034
J1375
J1031
R1403
W308B
R1203
C1371
C1208
R1371
J1048
W1903
+ -
J1003
C1102
C1301
J1018
J1016
J1011
Q1316
R1345
J1002
R1342
J1006
Q1314
C1307
IC1001
1 11 22 12
C1221
C1223
C1308
R1374
C1326
J1032
J1041
CP1902
R1404
R1341
J1004
J1014
R1344
Q1315
R1343
R1405
C1121
R1101
R1302
C1108
J1306
C1101
J1020
R1303
C1105
C1303
C1122
C1302
J1015
R1103
C1107
C1304
C1123
R1104
R1401
R1318
R1402
R1102
C1103
C1106
C1109
C1104

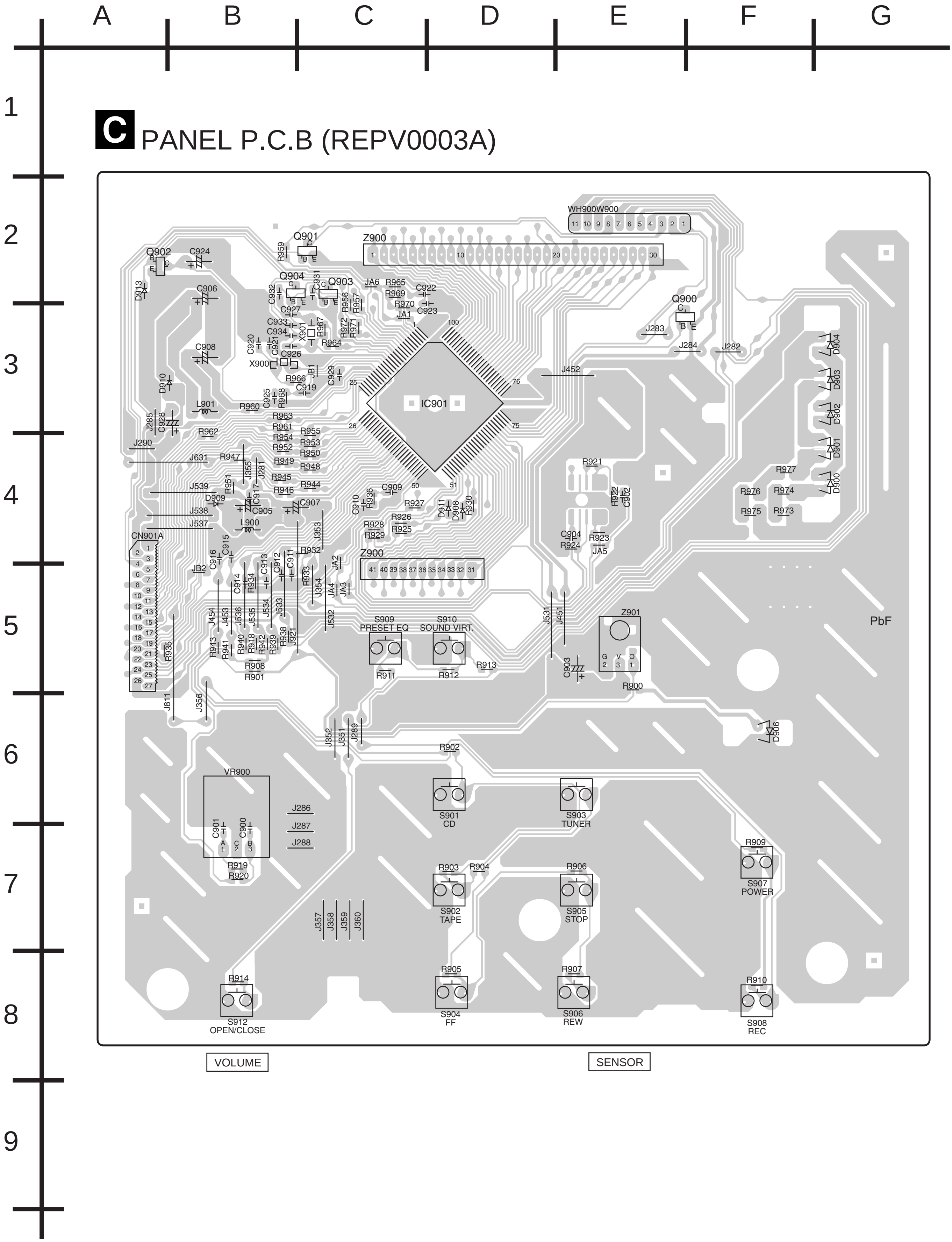
E DECK MECHANISM P.C.B (REPX0321H)


S973
CR02
J13
J30
S972
HALF
R973
J5
J11
J12
S971
MODE
J14
1
9
CS971
S975
RECINH_F
J6
D971
J4
4 1
IC971
3 2
J10
J16
J8
J9
J7
R972
PL+
PL-
SOLENOID

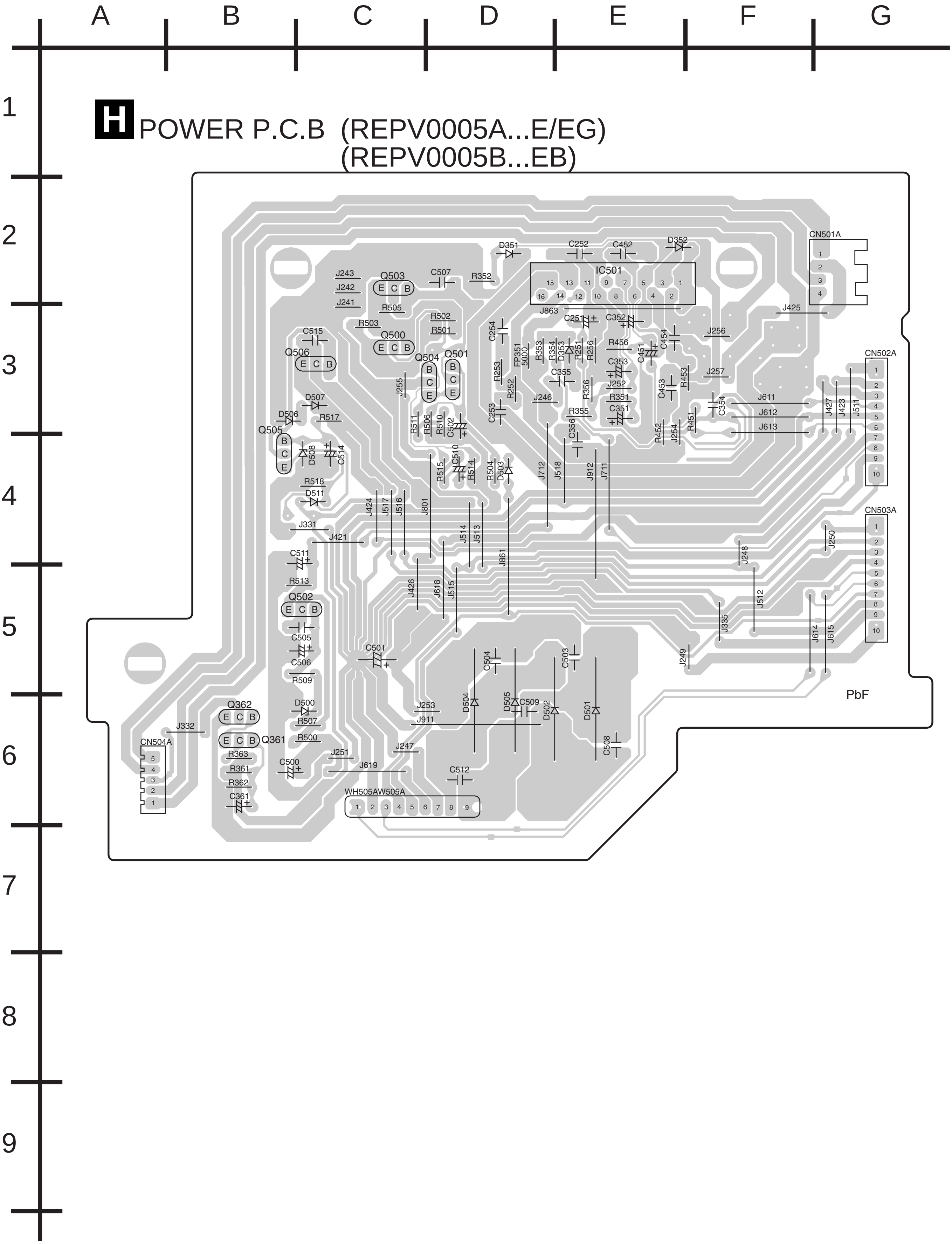
B MAIN P.C.B (REPV0004A)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
FM LOOP/ ANTENNA
AM LOOP/ ANTENNA
JK1
Z20
ANT
GND
GND
V↑
+B
IF
OSC
Z1
Z2
CF1
CF2
IC1
IC2
IC800
IC801
IC802
Q1
Q2
Q3
Q6
Q800
Q801
Q802
Q803
Q804
Q805
Q806
CN802A
CN803A
CN801
CN901B
WH800
CP800
X2
X3
X801
L1
L2
L801
L802
L803
L807
D1
D301
D302
D801
D802
PbF

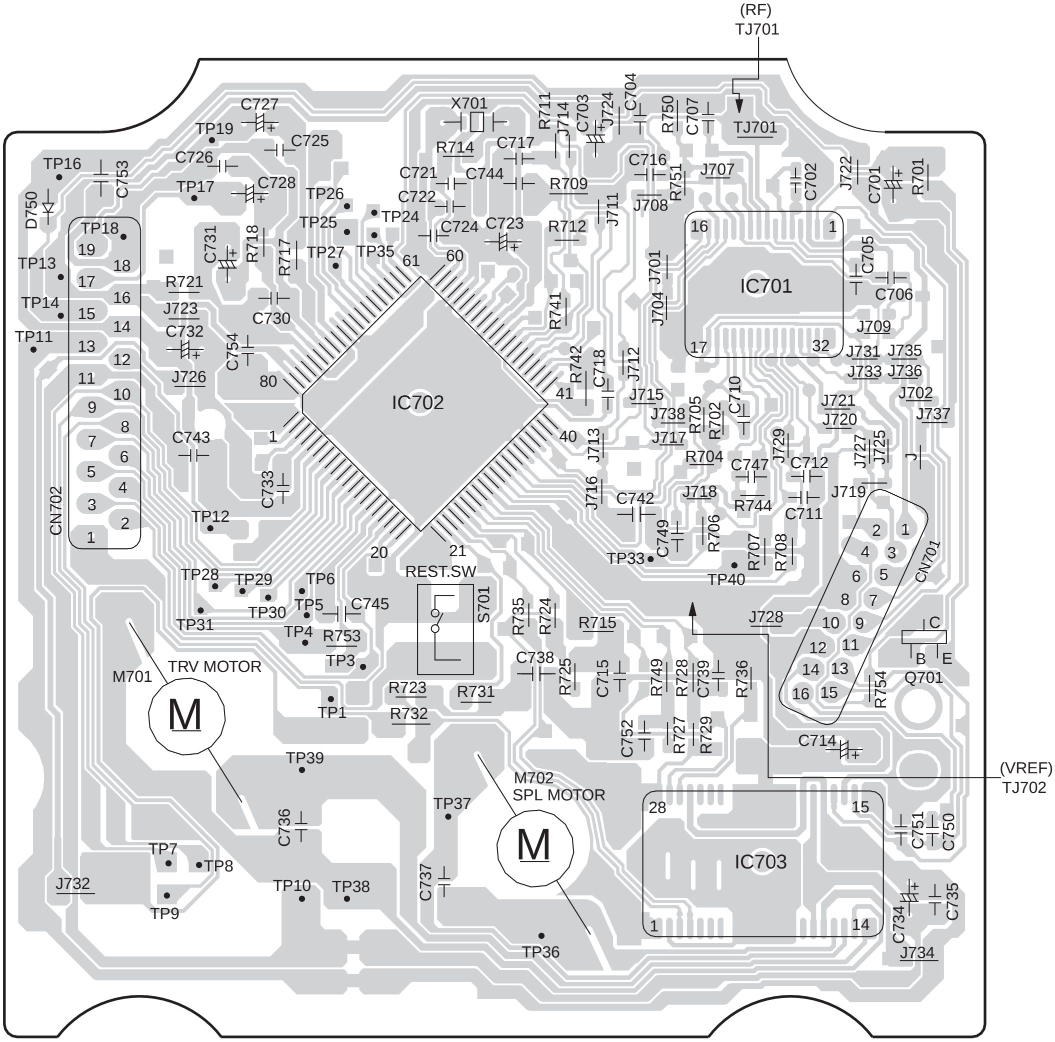
C PANEL P.C.B (REPV0003A)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
WH900W900
11 10 9 8 7 6 5 4 3 2 1
Z900
1
10
20
30
Q901
Q902
Q903
Q904
Q900
C924
C906
C908
D913
D910
L901
J285
C928
J290
R962
R959
C932
C927
C931
R956
R957
JA6
R965
R969
R970
C922
C923
JA1
C933
C934
X901
R967
R972
R971
R964
C920
C921
C926
X900
JB1
C929
R966
C919
C925
R968
R960
R963
R961
R954
R952
R955
R953
R950
R949
R948
R947
J631
J355
J281
R945
R944
R946
R951
J539
D909
C917
C905
C907
J538
J537
L900
CN901A
C916
C915
JB2
C914
R934
C913
C912
C911
R933
R932
J353
J354
JA4
JA3
JA2
J454
J453
J536
J535
J534
J533
J532
R943
R941
R940
R918
R942
R939
R938
J921
R935
R908
R901
J811
J356
IC901
1
25
26
50
51
75
76
100
C910
R936
C909
R927
R926
R928
R929
R925
D911
D908
R930
Z900
41 40 39 38 37 36 35 34 33 32 31
S909
PRESET EQ
S910
SOUND VIRT.
R911
R912
R913
J283
J284
J282
J452
R921
R922
C902
C904
R924
R923
JA5
J531
J451
Z901
G V O
2 3 1
C903
R900
D904
D903
D902
D901
D900
R977
R976
R974
R975
R973
PbF
D906
J352
J351
J289
R902
VR900
C901
C900
A C B
1 2 3
R919
R920
J286
J287
J288
S901
CD
S903
TUNER
R909
S907
POWER
R903
R904
S902
TAPE
R906
S905
STOP
J357
J358
J359
J360
R914
S912
OPEN/CLOSE
R905
S904
FF
R907
S906
REW
R910
S908
REC
VOLUME
SENSOR

H POWER P.C.B (REPV0005A...E/EG)
(REPV0005B...EB)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
D351
C252
C452
D352
CN501A
IC501
J243
Q503
C507
R352
J242
J241
R505
J863
J425
R502
R503
C251
C352
R501
C515
Q500
C254
J256
Q506
Q504
Q501
R456
C454
C451
CN502A
FP351
5000
R353
R354
D353
R251
R256
C353
R253
C355
R453
J257
J255
R252
R356
J252
C453
J611
J246
R351
C354
J427
J423
J511
D507
C253
R355
C351
J612
D506
R517
R511
R506
R510
C502
C356
R452
J254
R451
J613
Q505
D508
C514
R515
C510
R514
R504
D503
J712
J518
J912
J711
R518
D511
J424
J517
J516
J801
CN503A
J331
J421
J514
J513
J250
C511
J861
J248
R513
J426
J618
J515
J512
Q502
J335
C505
J614
J615
C501
C504
C503
J249
C506
R509
D504
D505
C509
D502
D501
PbF
Q362
D500
J253
R507
J911
J332
R500
Q361
C508
CN504A
J247
R363
J251
C500
J619
R361
C512
R362
C361
WH505AW505A
E C B
B C E

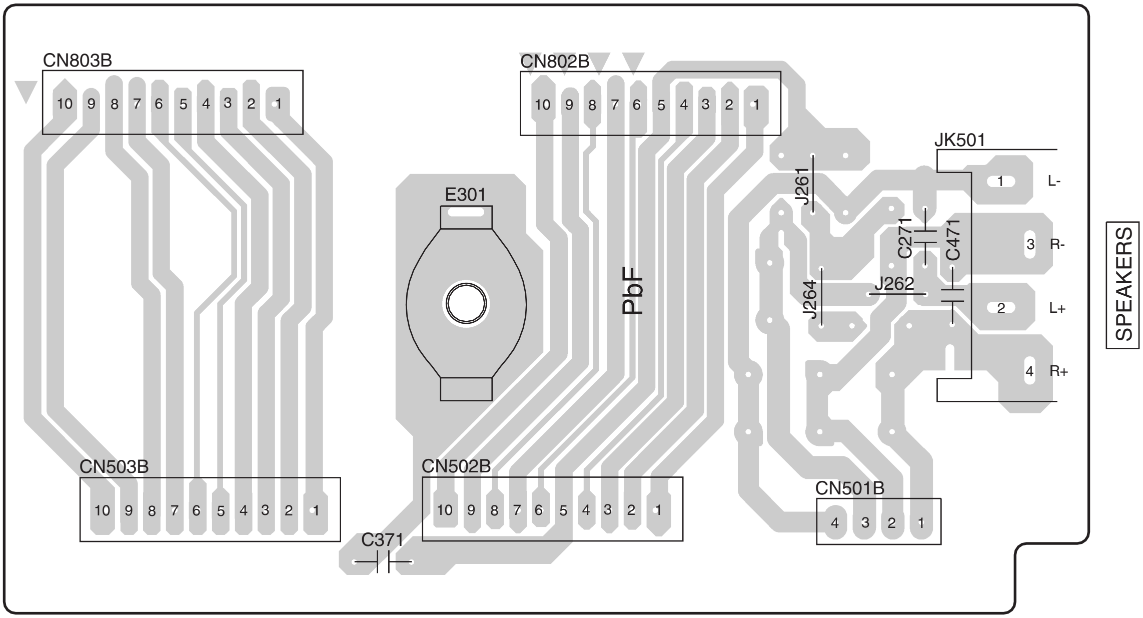
A CD SERVO P.C.B (REPX0362A)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
(RF)
TJ701
(VREF)
TJ702
C727
TP19
C725
C726
TP16
C753
TP17
C728
D750
TP18
TP13
TP14
TP11
CN702
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
C731
R718
R717
TP26
TP25
TP24
TP27
TP35
R721
J723
C732
C730
C754
J726
C743
C733
TP12
X701
R714
C717
C721
C722
C744
C724
C723
R711
J714
C703
J724
C704
R750
C707
C716
R709
R751
J707
J708
R712
J711
C702
J722
C701
R701
IC701
16
1
17
32
C705
C706
J701
J704
J709
J731
J735
J733
J736
IC702
61
60
80
41
40
20
21
R741
R742
C718
J712
J715
J738
J717
R705
R702
C710
J721
J720
J702
J737
J713
R704
C747
J729
C712
J727
J725
J
J716
C742
J718
R744
C711
J719
C749
R706
R707
R708
TP33
TP40
CN701
2
1
4
3
6
5
8
7
10
9
12
11
14
13
16
15
TP28
TP29
TP6
TP30
TP5
C745
TP31
TP4
R753
TP3
REST.SW
S701
R735
R724
R715
J728
C
B
E
Q701
M701
TRV MOTOR
M
C738
R725
C715
R749
R728
C739
R736
R754
TP1
R723
R731
R732
C752
R727
R729
C714
TP39
M702
SPL MOTOR
TP37
C736
IC703
28
15
1
14
C751
C750
C734
C735
J734
TP7
TP8
TP9
J732
TP10
TP38
C737
TP36

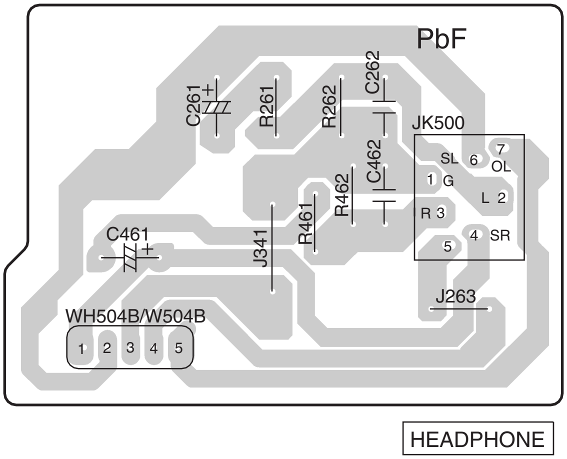
A B C D E F G

1 2 3 4 5 6 7 8 9

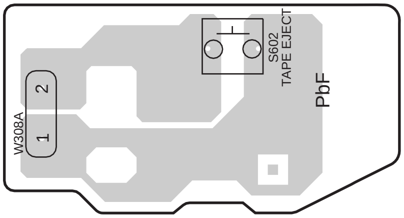
G SPEAKER TERMINAL P.C.B (REPV0005A...E/EG) (REPV0005B...EB)


CN803B
10 9 8 7 6 5 4 3 2 1
CN802B
10 9 8 7 6 5 4 3 2 1
E301
PbF
JK501
1 L-
3 R-
2 L+
4 R+
SPEAKERS
J261
C271
C471
J264
J262
CN503B
10 9 8 7 6 5 4 3 2 1
CN502B
10 9 8 7 6 5 4 3 2 1
C371
CN501B
4 3 2 1

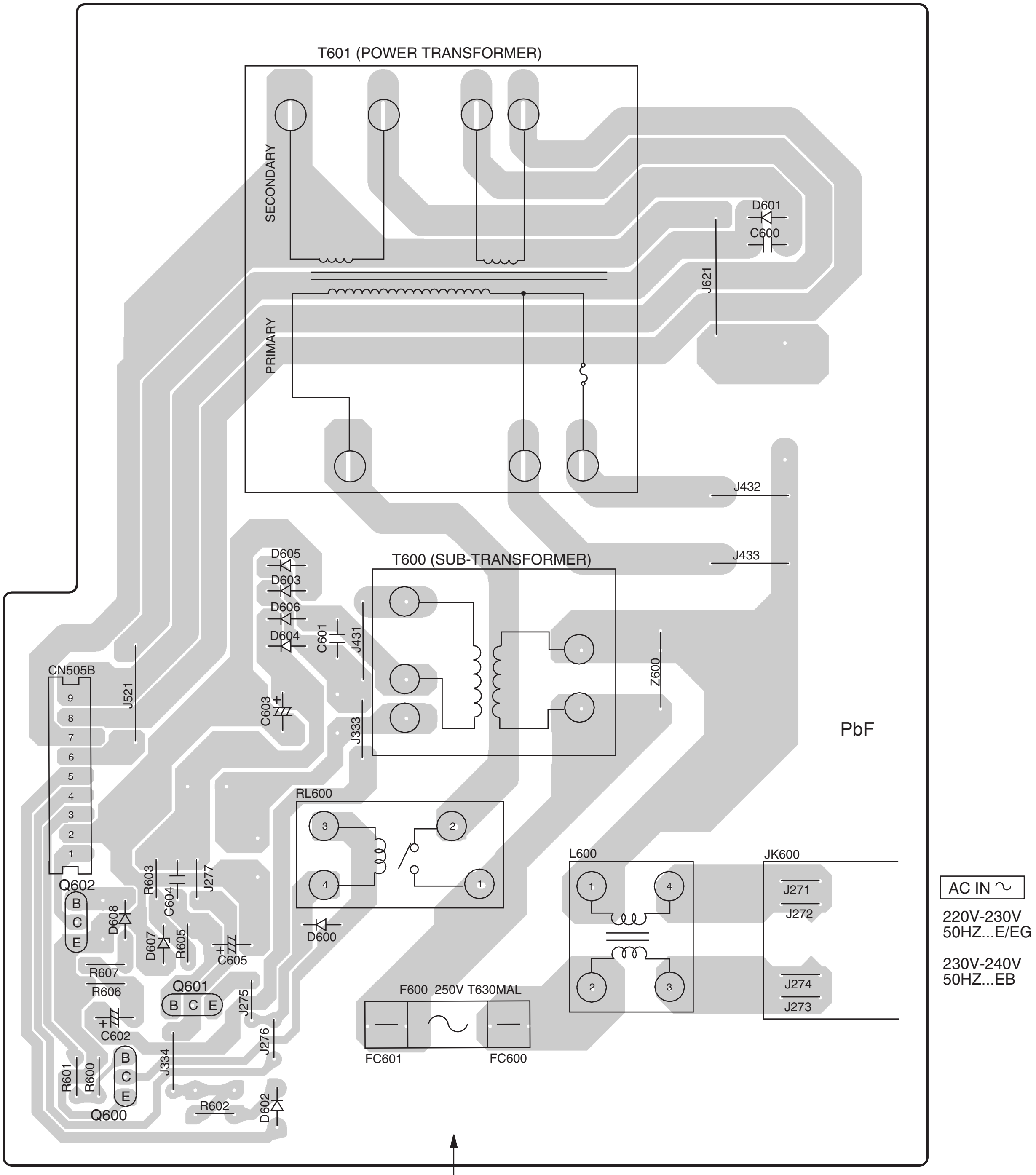
I HEADPHONE P.C.B (REPV0005A...E/EG) (REPV0005B...EB)


PbF
C261
R261
R262
C262
JK500
SL 6
7 OL
1 G
L 2
R 3
4 SR
5
C462
R462
R461
J341
C461
J263
WH504B/W504B
1 2 3 4 5
HEADPHONE

F TAPE EJECT P.C.B (REPX0350C)


S602 TAPE EJECT
PbF
W308A
2
1

J TRANSFORMER P.C.B (REPV0005A...EG/E)
(REPV0005B...EB)


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
T601 (POWER TRANSFORMER)
SECONDARY
PRIMARY
D601
C600
J621
J432
J433
D605
D603
D606
D604
C601
J431
T600 (SUB-TRANSFORMER)
Z600
CN505B
9
8
7
6
5
4
3
2
1
J521
C603
J333
PbF
RL600
3
2
4
1
L600
1
4
2
3
JK600
J271
J272
J274
J273
AC IN ~
220V-230V
50HZ...E/EG
230V-240V
50HZ...EB
Q602
B
C
E
D608
R603
C604
J277
D607
R605
C605
D600
R607
R606
Q601
B C E
J275
C602
F600 250V T630MAL
FC601
FC600
R601
R600
B
C
E
J334
J276
Q600
R602
D602

CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH THIS P.C.B